FIRST NATIONS'
Emergency Services

Basic Fire Fighter Training Program

Training Material

(Skills Development & Maintenance)

Fire Services Department, Fire Department Training Programs

FIRST NATIONS' Emergency Services

Basic Fire Fighter Training Program
(Skills Development & Maintenance)

Fire Services Dept.
Fire Department Training Programs

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REGIONAL TRAINING WEEKEND RESOURCE LIST

The following equipment is required as a minimum, in order to run a successful Skills Development & Maintenance workshop at your fire department.

Section1 - Safety,

Bunker gear with gloves and helmet, Engine for 3 point contact drill, 2 portable lights with electrical cord and generator, gas meter prop, electrical service prop, accountability board.

Section 2 - SCBA,

7 SCBA Packs with 12 bottles, 6 masks, stop watch, alcohol swabs, 4 big tables.

Section 3 - SCBA,

6 SCBA Packs with 12 bottles, 6 masks, alcohol swabs, restricted vision inserts, 100' 1 ½" hose line with nozzle, restricted passage prop (I use sewer pipe).

Section 4 - Ropes and Knots,

12 Rope ends, 1 hoisting line, laptop with lesson plan, axe, pike pole, 50' 1 ½ " hose line with nozzle.

Section 5 - Ground Ladders,

Roof ladder, 26' extension ladder, 50' 1 ½" hose with nozzle.

Section 6 - Ventilation,

PPV Fan, 150' 1 1/2 " hose line with nozzle, Safety Officer with backup line and nozzle, propane bottle with torch and striker. Two SCBA packs with 8 bottles. Two radios. Full PPE for instructor and safety.

Section 7 - Fire Hose,

300' of 1 ½ " hose line, 100' of 2 ½" hose line, 100' of 4 " hose line, one 1 ½" nozzle, one 2 ½ " nozzle, hose clamp, hydrant wrench, 2 ½" gate valve, 2 ½" to 1 ½' reducer. Double male and double female adapter, gated wye, 2 hose wrenches.

Section 8 - Water Supply,

Engine, 200' of 4" hose line,200' of 2 ½"hose, hydrant wrench, 2 hose wrenches, 2 radios, drafting pit, 20' of hard suction hose with strainer, rubber mallet, crow bar to remove pit lid. 100' of 1 ½" hose line with nozzle.

SECTION 1

Training Topic: ACCOUNTABILITY

Objective(s): TO GAIN AN UNDERSTANDING OF ACCOUNTIBILITY REQUIREMENTS, PROCEDURES AND GUIDELINES.

Details	Resources
	JIBC Basic Fire Fighter Certification Program. WorksafeBC, Section 31. NFPA 1500.

Time	Instructor	Firefighter(s)
	Explain what a passport or accountability board is. Show a passport/accountability board with passports and name tags affixed (or fire department accountability system). Explain and demonstrate the following; • Every fire department must use some system of accountability that identifies and tracks all personnel working in the hazard zone of an incident. • The importance of fire ground accountability and why the fire service has this system. • Accountability is vital in the event of a sudden or unexpected change in fire behavior or a structural collapse. If the Incident Commander does not know who is in the hazard zone, it is impossible to determine who and how many may be trapped inside. Over the years, many fire fighters have died because they were not known to be missing until it was too late.	Listen and ask questions.

Training Topic: ACCOUNTABILITY		
Time	**Instructor**	**Firefighter(s)**
	• Read and show the students Section 31 from WorksafeBC, highlighting mandated fire ground accountability requirements. Explain that this is mandated law and comply or face the chance of a heavy penalty.	Review handout.
	Demonstrate how Incident Commander tracks responding members on the accountability board.	Provide accountability tags, view demonstration.
	Have students demonstrate how the Incident Commander tracks responding members on the accountability board.	Demonstrate how to track responding members on the accountability board.

ACCOUNTABILITY BOARD AND PASSPORT SYSTEM

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Incident Accountability

31.5 Procedures

(1) Written procedures must be established and followed by a fire department or industrial fire brigade to

(a) manage and track firefighters at an emergency incident,

(b) manage exposure to bloodborne pathogens,

(c) manage stress arising from an emergency incident that is likely to cause adverse health effect to firefighters,

(d) provide for effective traffic control at emergency incidents, and

(e) operate firefighting vehicles during emergency and non-emergency travel.

(2) Written procedures must be established and followed by a fire department or industrial fire brigade for the following situations, where applicable:

(a) fires in buildings 7 storeys or over;

(b) firefighting over water and underground;

(c) fires and other emergency incidents involving hazardous substances;

(d) rescue from high angles, confined spaces, trenches, excavations and water;

(e) disaster planning and response;

(f) electrical emergencies.

SECTION 1

Training Topic: PERSONAL PROTECTIVE EQUIPMENT DONNING AND DOFFING

Objective(s): Personal Protective Equipment Awareness, Donning and Doffing Skills Development.

Details	Resources
	Essentials of Fire Fighting, 5th Edition.

Time	Instructor	Firefighter(s)
	Review all PPE equipment that is available to the fire fighter by the authority having jurisdiction (AHJ). Explain the purpose of each piece of equipment and how each piece impacts fire fighter safety.	Listen and ask questions.
	Demonstrate donning of all PPE including; • Boots on, bunker pants closed and secured with belt or suspenders. • Jacket buckles done up, collar up and closed. • Gloves on and tucked under sleeves of jacket. • Helmet on, chin strap secured.	Watch and ask questions.
	Have fire fighter(s) don the protective clothing piece by piece.	Fire fighter dons all personal protective equipment.

Training Topic: PERSONAL PROTECTIVE EQUIPMENT DONNING AND DOFFING		
Time	**Instructor**	**Firefighter(s)**
	As the fire fighter is donning the equipment, explain each piece of the equipments safety level, the equipments limitations and the importance of maintaining and cleaning the equipment.	Ask questions.
	Demonstrate doffing of PPE and store in the ready position.	Watch, listen and ask questions.
	Have students doff PPE and store in the ready position.	Doff PPE and store in the ready position.
	Review maintenance and care required for all PPE. Equipment that is damaged or in need of repair must be addressed at this time.	Listen and ask questions.

PPE DONNING

1

2

3

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PERSONAL PROTECTIVE EQUIPMENT DONNING

SECTION 1

Training Topic: RESPONSE ON THE APPARATUS

Objective(s): TO EXPLAIN AND DEMONSTRATE APPARATUS RESPONSE SAFETY AND THREE POINT CONTACT FOR MOUNT AND DISMOUNT AND HAVE STUDENTS DEVELOP PRACTICAL SKILLS IN RESPONSE SAFETY AND 3 POINT CONTACT DISMOUNT.

Details	Resources
	JIBC Basic Fire Fighter Certification Program. Essentials of Fire Fighting, 5th Edition.

Time	Instructor	Firefighter(s)
	As a fire fighter, one of the most common dangers to which a fire fighter will be exposed is riding on the apparatus to and from emergency calls. Statistically, this is one of the most hazardous activities of the job. In 2005, 115 fire fighters died in the line of duty (North America), 23 of these deaths were a result of responding to or from an incident.	
	Demonstrate to students how to correctly use the three point contact method of getting on and off the apparatus including; • Locate and show hearing protection and/or the headsets on the apparatus. Explain the importance of hearing protection. • Demonstrate the correct use of the apparatus seat belt and emphasize the motor vehicle act and WorksafeBC responsibilities.	Watch demonstration and ask questions.

Training Topic: RESPONSE ON THE APPARATUS		
Time	**Instructor**	**Firefighter(s)**
	• Have each student mount apparatus using three point contact, secure seat belt in a seated position, and put on hearing protection. • Have each student dismount apparatus using three point contact.	Demonstrate three point contact both on and off the apparatus.

THREE POINT CONTACT

SECTION 1

Training Topic: SCENE ILLUMINATION, ELECTRICAL AND GAS SAFETY

Objective(s): EXPLAIN AND DEMONSTRATE EMERGENCY SCENE LIGHTING, ELECTRICAL AND GAS SAFETY AND HAVE THE STUDENTS DEVELOP THESE PRACTICAL SKILLS.

Details	Resources
	JIBC Basic Fire Fighter Certification Program. Essentials of Fire Fighting, 5th Edition. Fundamentals of Fire Fighter Skills, 2004.

Time	Instructor	Firefighter(s)
	Follow the manufactures recommendations for starting, fueling and maintenance. Explain the importance of generator storage with the fuel shut off valve in the closed position. If the fuel shut off valve is left in the open position, fuel can leak into the crank case, and in turn mix with the oil. This mixing results in the oil 'breaking down' and not being able to provide the protection it is designed for. Demonstrate the correct startup procedures of the generator. Have students demonstrate the startup procedures of the generator.	Ask questions Watch demonstration Demonstrate generator starting procedure.

Training Topic: SCENE ILLUMINATION, ELECTRICAL AND GAS SAFETY		
Time	**Instructor**	**Firefighter(s)**
	Demonstrate scene illumination using fire departments equipment; • Position portable lights on dry level surfaces such that the light will be stable, not blind workers, provide light for operation and are out of main traffic areas. • Illumination of the ground near the apparatus will make it easier for fire fighters to see tripping hazards such as hose or cords. • Whenever possible, place a light near ground level at the entry/exit door. Having this light at this location makes it easier for the fire fighter to find his/her way to the door. • Position junction boxes within reach of extension cords and out of main traffic areas. • Connect and disconnect cords using cord ends (avoid pulling on cord).	Watch and ask questions.
	Have each student start the generator and demonstrate scene illumination. Explain importance of fire ground electrical safety, and how to locate main breaker box inside a structure by locating service entering the structure.	Demonstrate scene illumination. Listen and ask questions.

Training Topic: SCENE ILLUMINATION, ELECTRICAL AND GAS SAFETY		
Time	**Instructor**	**Firefighter(s)**
	Demonstrate or describe the correct way to shut off an electrical source in a building (main breaker on breaker box). Explain why this is important for fire fighter safety including; • Exposed, charged wires inside a structure can represent a deadly shock hazard to fire fighters operating inside. • Exposed, charged wires inside a structure can ignite a fire.	Watch demonstration and ask questions.
	Have students turn off main breaker on box.	Demonstrate turning off main breaker on box.
	Explain and demonstrate the correct way to shut off a gas supply to a structure. Discuss with students why this is important for fire fighter safety including; • Natural gas in its pure form is methane, which is flammable but nontoxic. Natural gas is lighter than air so it tends to rise and diffuse in the open. • Natural gas can be explosive in concentrations between 5 and 15 percent with air. • Natural gas that leaks underground in wet soil can lose its odorant and become very difficult to detect without the aid of specialized instruments.	Watch and ask questions.
	Have students demonstrate how to turn off a natural gas meter.	Demonstrate how to turn off a natural gas meter.

EMERGENCY SCENE LIGHTING PROCEDURE

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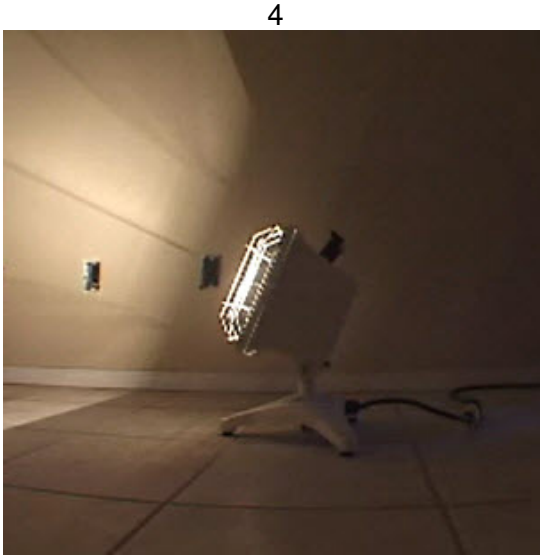
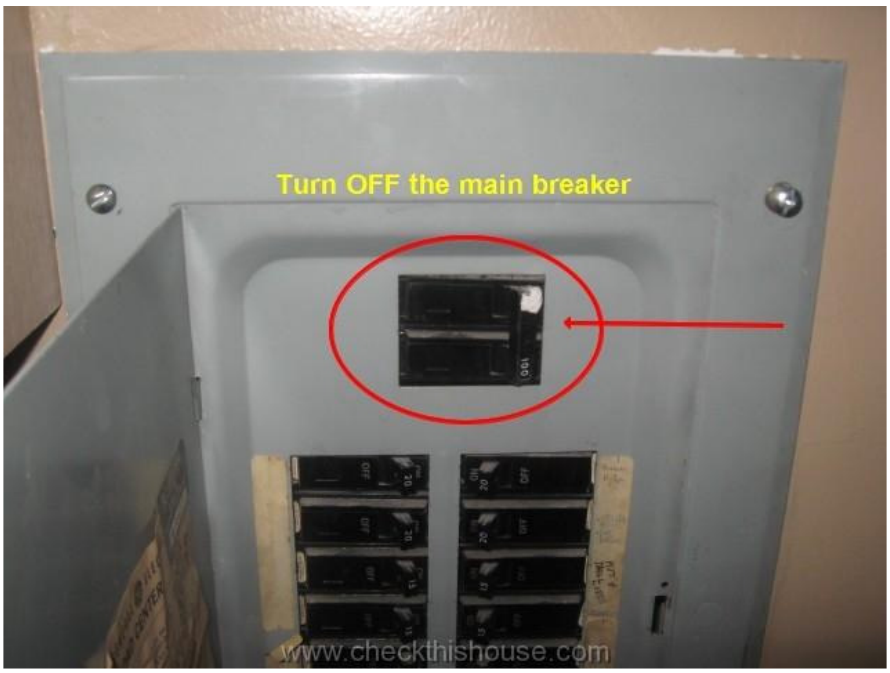
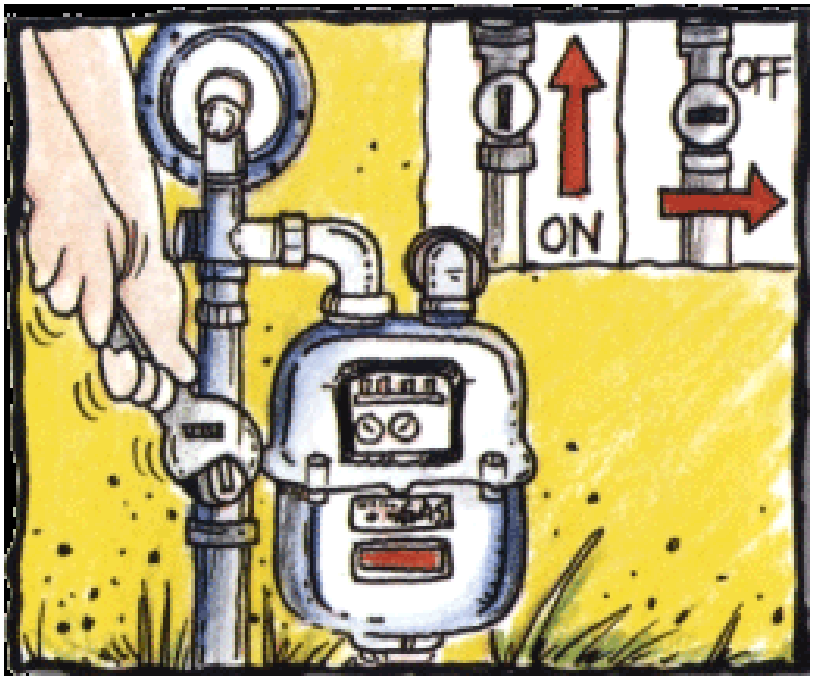


ELECTRICAL AND GAS SHUT OFF





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Part 31 Firefighting

See what's *new!*

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31.1 Definitions

In this Part

"emergency incident" means a specific emergency operation of a fire department or industrial fire brigade;

"fire chief" means the highest ranking person in charge of a fire department or industrial fire brigade;

"fire department" means a fire brigade operated as a public service by an employer specified in clause (c) of the definition of "worker" in section 1 of the *Workers Compensation Act*;

"firefighter" means any worker employed in firefighting, fire inspection, fire investigation, the maintenance of firefighting equipment, the training for and direction of those activities, or other similar duties;

"firefighting vehicle" means an emergency vehicle used for firefighting;

"incident commander" means the firefighter in overall command of an emergency incident;

"industrial fire brigade" means an organization established by an employer to protect the employer's premises where the nature of the business creates specific hazards for which specialized training and equipment is required;

"structure" means a building, vehicle, vessel or similar enclosed location.

31.2 Application

This Part applies to employers and to workers who are employed in firefighting activities on a full or part time basis, including volunteer firefighting in municipal service and industrial fire brigades under Part 1 of the *Workers Compensation Act*, but does not apply to forest fire fighting.

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31.3 Health and safety committee

(1) If an employer is required under Part 3 of the *Workers Compensation Act* to establish a joint commitee or worker health and safety representative, then a fire department or industrial fire brigade operated by the employer must have a separate joint committee or worker health and safety representative, as applicable.

(2) Subsection (1) does not affect any obligation to have a workplace health and safety program for the whole of the employer's operations.

31.4 Instruction and direction

The employer must ensure the adequate instruction and direction of firefighters in the safe performance of their duties.

31.5 Procedures

(1) Written procedures must be established and followed by a fire department or industrial fire brigade to

(a) manage and track firefighters at an emergency incident,

(b) manage exposure to bloodborne pathogens,

(c) manage stress arising from an emergency incident that is likely to cause adverse health effect to firefighters,

(d) provide for effective traffic control at emergency incidents, and

(e) operate firefighting vehicles during emergency and non-emergency travel.

(2) Written procedures must be established and followed by a fire department or industrial fire brigade for the following situations, where applicable:

(a) fires in buildings 7 storeys or over;

(b) firefighting over water and underground;

(c) fires and other emergency incidents involving hazardous substances;

(d) rescue from high angles, confined spaces, trenches, excavations and water;

(e) disaster planning and response;

(f) electrical emergencies.

31.6 Rest and rehabilitation

The incident commander must make suitable provision for rest and rehabilitation for firefighters at an emergency incident.

31.7 Impounding equipment

If, in the course of an emergency incident, a firefighter suffers serious injury or death, or is involved in an accident involving a risk of serious injury or death, the senior firefighter present must immediately impound the protective and other equipment used by the firefighter and keep the equipment out of service until released by the Board.

31.8 Equipment defects

The employer must, without delay, notify the Board of any structural failure or manufacturing defects detected in a firefighting vehicle, apparatus, or other emergency equipment referred to in this Part.

31.9 Test records

The employer must keep the test and inspection records required by this part available at the workplace for inspection by an officer or the joint committee or worker health and safety representative, as applicable.

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31.10 General requirement

Firefighters must wear personal protective clothing and equipment appropriate to the hazards to which they may be exposed.

31.11 Maintenance

(1) The employer must have written procedures for the inspection of protective clothing and equipment at regular intervals.

(2) Procedures for cleaning and drying protective clothing must be in accordance with the manufacturer's instructions.

(3) Defective items of protective clothing or equipment must be repaired or replaced.

31.12 Firefighter responsibility

Firefighters must ensure that the personal protective clothing and equipment used by them is maintained in good condition.

31.13 Safety headgear

(1) Safety headgear must be worn by firefighters required to approach the seat of a fire or enter a structure or other hazardous area during an incident.

(2) Safety headgear must meet the requirements of *NFPA 1972, Helmets for Structural Firefighting: Structural Fire Fighters Helmets, 1992 Edition*.

(3) Headgear meeting the requirements for safety headgear in Part 8 (Personal Protective Clothing and Equipment) may be used by firefighters

(a) while determining the cause of fires, or carrying out duties associated with preventing fires, or

(b) at the discretion of the incident commander, while fighting a fire in vegetation that is not within a structure.

[Amended by B.C. Reg. 312/2003, effective October 29, 2003.]

* See also section 4.4 of the OHS Regulation.

31.14 Protective coats, pants and hoods

Firefighters required to approach the seat of a fire or enter a structure or other hazardous area during an incident must wear protective coats, pants and hoods meeting the requirements of

(a) *NFPA 1971, Protective Clothing for Structural Fire Fighting, 1991 Edition*, or

(b) *CGSB Standard CAN/CGSB-155.1-M88, Firefighters' Protective Clothing for Protection Against Heat and Flame*.

(c) Repealed. [B.C. Reg. 312/2003, effective October 29, 2003.]

[Amended by B.C. Reg. 312/2003, effective October 29, 2003.]

* See section 4.4 of the OHS Regulation.

31.15 Stationwear and personal garments

Firefighters required to approach the seat of a fire or enter a structure or other hazardous area during an emergency incident must not wear shirts, trousers, jackets or coveralls that have poor thermal stability or that ignite easily.

31.16 Working gloves

Firefighters required to approach the seat of a fire or enter a structure or other hazardous area during an emergency incident must wear gloves meeting the requirements of *NFPA 1973, Gloves for Structural Fire Fighting, 1988 Edition*.

[Amended by B.C. Reg. 312/2003, effective October 29, 2003.]

* See also section 4.4 of the OHS Regulation.

Note: See Part 19 (Electrical Safety) for personal protective equipment and other safety measures required for work involving electrical hazards.

31.17 Fall protection

(1) A firefighter working on an aerial ladder must wear a safety belt and lanyard meeting the requirements of *CSA Standard Z259.1-95, Safety Belts and Lanyards*, and the securing lanyard must limit a fall to no more than 30 cm (12 in).

(2) A firefighter located on an aerial platform must wear a full body harness and lanyard meeting the requirements of Part 11 (Fall Protection).

(3) Rescue ropes, rappelling lines and safety belts and harnesses including safety hooks, rope grabs, lowering devices, and related equipment must meet the requirements of *NFPA 1983, Fire Service Life Safety Rope, Harness and Hardware, 1990 Edition*.

(4) The incident commander may depart from the requirements of Part 11 (Fall Protection) to use a fall protection system if, in the incident commander's opinion, such compliance is not practicable or may create a greater hazard, but subsections (1) to (3) of this section must be complied with.

[Amended by B.C. Reg. 312/2003, effective October 29, 2003.]

* See also section 4.4 of the OHS Regulation.

31.18 Personal alert safety system

(1) A firefighter must be provided with and use a Personal Alert Safety System (PASS) when involved in duties which require a self- contained breathing apparatus to be worn.

(2) A PASS device must meet the requirements of *NFPA 1982, Personal Alert Safety Systems (PASS) for Fire Fighters, 1993 Edition*.

(3) A PASS device must be tested at least weekly and prior to use.

[Amended by B.C. Reg. 312/2003, effective October 29, 2003.]

* See also sections 4.3 and 4.4 of the OHS Regulation.

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Respirators

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31.19 General

Firefighters who may be exposed to an oxygen deficient atmosphere or to harmful concentrations of air contaminants must wear a self-contained breathing apparatus of a positive pressure type having a rated minimum duration of 30 minutes.

31.20 Fitness to use SCBA

A physician's certificate of fitness to use self-contained breathing apparatus must be provided to the employer by a firefighter who

(a) experiences breathing difficulty while using the apparatus, or

(b) is known to have heart disease, impaired pulmonary function, or any other condition that might make it dangerous for the firefighter to use self-contained breathing apparatus.

31.21 Operation of SCBA

Respirators must be used in accordance with *CSA Standard CAN/CSA-Z94.4-02, Selection, Use, and Care of Respirators*, Clause 9.1.

[Amended by B.C. Reg. 312/2003, effective October 29, 2003.]
[Amended by B.C. Reg. 20/2006, effective May 17, 2006.]

31.22 Sealing and fit testing

(1) Firefighters who use a self-contained breathing apparatus must be clean shaven to ensure that the mask forms a positive seal against the face.

(2) Fit tests must be performed in accordance with procedures in *CSA Standard CAN/CSA-Z94.4-02, Selection, Use, and Care of Respirators*.

(2.1) A fit test must be carried out

(a) before initial use of a respirator,

(b) at least once a year,

(c) whenever there is a change in respirator facepiece, including the brand, model, and size, and

(d) whenever changes to the user's physical condition could affect the respirator fit.

(3) Personal protective equipment that is worn with self-contained breathing apparatus and might interfere with a proper fit must be worn during the fit test.

(4) Only corrective eyewear designed for use with self-contained breathing apparatus may be worn.

[Amended by B.C. Reg. 312/2003, effective October 29, 2003.]
[Amended by B.C. Reg. 20/2006, effective May 17, 2006.]

31.23 Entry into buildings

(1) When self-contained breathing apparatus must be used to enter a building, or similar enclosed location, the entry must be made by a team of at least 2 firefighters.

(2) Effective voice communication must be maintained between firefighters inside and outside the enclosed location.

(3) During the initial attack stages of an incident at least one firefighter must remain outside.

(4) A suitably equipped rescue team of at least 2 firefighters must be established on the scene before sending in a second entry team and not more than 10 minutes after the initial attack.

(5) The rescue team required by subsection (4) must not engage in any duties that limit their ability to make a prompt response to rescue an endangered firefighter while interior structural firefighting is being conducted.

31.24 Air quality and sampling

(1) The employer must ensure that air used for breathing purposes meets the requirements of *CSA Standard CAN/CSA-Z180.1-00, Compressed Breathing Air and Systems*.

(2) The air must be tested at least once annually in a manner acceptable to the Board.

[Amended by B.C. Reg. 312/2003, effective October 29, 2003.]
[Amended by B.C. Reg. 20/2006, effective May 17, 2006.]

31.25 Spare equipment

(1) When self-contained breathing apparatus are used, the employer must ensure there are at least 4 apparatus available.

(2) At least one spare compressed air cylinder, having a rated minimum duration of 30 minutes, must be maintained at full rated capacity and available for each self-contained breathing apparatus.

31.26 Maintenance and records

(1) Self-contained breathing apparatus, including regulators, must be serviced and repaired by qualified persons.

(2) Inspection of compressed air cylinders must be done in accordance with *CSA Standard CAN/CSA-Z94.4-02, Selection, Use, and Care of Respirators*.

(3) Compressed air cylinders must be hydrostatically tested in accordance with *CSA Standard CAN/CSA-B339-96, Cylinders, Spheres, and Tubes for the Transportation of Dangerous Goods*.

(4) Complete maintenance and repair records for each self-contained breathing apparatus and all air cylinders must be kept in accordance with the requirements of *CSA Standard CAN/CSA-Z94.4-02, Selection, Use, and Care of Respirators* (section 10.3.3.2.2-b to f, inclusive).

[Amended by B.C. Reg. 312/2003, effective October 29, 2003.]
[Amended by B.C. Reg. 20/2006, effective May 17, 2006.]

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31.27 Seating

(1) Firefighters being transported by firefighting vehicles must ride in properly secured seats equipped with seat belts and providing not less than 41 cm (16 in) seating width for each occupant.

(2) The seats of all new firefighting vehicles ordered after April 15, 1998 must be equipped with headrests or other effective whiplash protection.

31.28 Communication

Crew cabs on firefighting vehicles must have an effective means of voice communication between the driver and passengers.

31.29 Enclosed crew cabs

(1) Enclosed crew cabs on firefighting vehicles must be equipped with interior lights, and adequately ventilated.

(2) New firefighting vehicles ordered after April 15, 1998 must have fully enclosed crew cabs meeting the requirements of *NFPA 1901, Automotive Fire Apparatus, 1991 Edition*.

[Amended by B.C. Reg. 312/2003, effective October 29, 2003.]

* See also section 4.4 of the OHS Regulation.

31.30 Stowing equipment

All equipment on a firefighting vehicle must be adequately secured.

31.31 Safe movement of vehicles

A firefighting vehicle must not be moved if the vision of the driver is obscured, except on a signal from a designated person, who must ensure that the vehicle can be moved safely.

31.32 Vehicle exhaust in firehalls

Unless air monitoring shows that levels of vehicle exhaust gas components are below the exposure limits established under section 5.48, effective local venting for the exhaust gases must be provided in vehicle areas in firehalls.

[Amended by B.C. Reg. 315/2003, effective October 29, 2003.]

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Aerial Devices and Ground Ladders

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31.33 General

An aerial device used for firefighting must meet the requirements of *NFPA 1904, Aerial Ladder and Elevating Platform Fire Apparatus, 1991 Edition*.

[Amended by B.C. Reg. 312/2003, effective October 29, 2003.]

* See also section 4.4 of the OHS Regulation.

31.34 Nondestructive testing

(1) A fire department aerial device must be inspected and tested in accordance with good engineering practice at intervals not exceeding 12 months, and certified as safe for use by a professional engineer or the equipment manufacturer.

(2) The inspection and testing of a fire department aerial device must be done in accordance with the requirements of *NFPA 1914, Testing Fire Department Aerial Devices, 1991 Edition*.

[Amended by B.C. Reg. 312/2003, effective October 29, 2003.]

* See also section 4.4 of the OHS Regulation.

31.35 Controls

The turntable on an aerial device must be fitted with a positive locking device to hold it in any desired position.

31.36 Operator location

During the operation of an aerial device an operator must be present at the lower controls in sight of and in voice contact with any firefighters upon the device.

31.37 Ground ladders

(1) A ground ladder used by firefighters must meet the requirements of *NFPA 1931, Design of and Design Verification Tests for Fire Department Ground Ladders, 1989 Edition*.

(2) A ground ladder must be used, tested and maintained in accordance with the requirements of *NFPA 1932, Use, Maintenance, and Service Testing of Fire Department Ground Ladders, 1989 Edition*.

[Amended by B.C. Reg. 312/2003, effective October 29, 2003.]

* See also section 4.4 of the OHS Regulation.

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31.38 Flashlights and hand lanterns

Battery operated flashlights and hand lanterns that are CSA approved for hazardous locations classified under the *CSA Standard C22.1-94, Canadian Electrical Code Part 1,* as Class 1, Division 2, Groups A, B, and C must be provided as follows:

(a) one flashlight for each firefighter;

(b) at least 4 hand lanterns for each firefighting vehicle.

31.39 Plaster hooks and pike poles

Plaster hooks and pike poles must be fitted with electrically non-conductive shafts.

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SECTION 2

Training Topic: SCBA DONNING AND DOFFING

Objective(s): TO EXPLAIN AND DEMONSTRATE SCBA DONNING OVERHEAD AND COAT METHOD, AND TO HAVE STUDENT DEVELOP PRACTICAL SKILLS IN DONNING AND DOFFING A SCBA.

Details	Resources
	JIBC Basic Fire Fighter Certification Program. Essentials of Fire Fighting, 5th Edition.

Time	Instructor	Firefighter(s)
	Considering the smoky and toxic atmospheres in which fire fighters must function, respiratory protection is critical. Failure to use a SCBA could lead to failed emergency operations, fire fighter injuries or fatalities. Well trained fire fighters must be aware of the procedures for donning and doffing SCBA and its proper care and maintenance.	
	Always conduct a pre-entry check which includes (explain and demonstrate); • Check the air cylinder gauge to ensure that the cylinder is full. • Check the harness assemblies to ensure the straps are fully extended. • Check the emergency bypass valve and ensure it is in the proper position. • Check cylinder for damage, hydrostatic test date, and ensure the cylinder is full.	Watch demonstration and ask questions.
	Explain and demonstrate how to don a SCBA including the following; • Don SCBA (overhead and coat method).	Watch demonstration and ask questions.

Training Topic: SCBA DONNING AND DOFFING		
Time	**Instructor**	**Firefighter(s)**
	Explain and demonstrate how to don a SCBA including the following; • Tighten shoulder straps, then clasp waist buckle. • Loosen shoulder straps to lower centre of gravity and weigh, ensure the weight of the SCBA is being carried on hips. • Don face mask, tightening straps straight back from the bottom up. • Left hand to low pressure regulator, right hand to tank valve. • With left hand, connect low pressure regulator to face piece and perform negative test and exhalation test. With right hand, open tank valve fully; listen for low air warning on start up. • Bring right hand up to SCBA air gauge, check for matching PSI between tank and gauge. Check bypass valve for proper operations. • Perform positive pressure test by pulling mask away from face. • Don balaclava, helmet and gloves. To doff SCBA, reverse the donning process.	Watch demonstration and ask questions.
	Have students demonstrate donning of SCBA	Don SCBA, attempt to complete within 60 seconds.

SCBA DONNING

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SECTION 2

Training Topic: SCBA INSPECTION AND MAINTENANCE

Objective(s): STUDENT SKILL DEVELOPMENT OF THE INSPECTION AND MAINTENANCE OF A SCBA.

Details	Resources
	Essentials of Fire Fighting, 5th Edition.

Time	Instructor	Firefighter(s)
	SCBA requires proper care and inspection before and after each use to provide complete protection for the fire fighter. Explain and demonstrate the inspections and maintenance of a SCBA including the following; • Differences between close circuit and open circuit SCBA. • Review components of Open Circuit SCBA including the harness, regulators, bypass valve, face piece and cylinder. • Explain the limitations of a SCBA including: air supply, visibility, weight, fogging. • Explain when to wear SCBA including: toxic and oxygen deficient atmospheres, elevated temperatures, smoke.	Listen and ask questions.

Training Topic: SCBA INSPECTION AND MAINTENANCE		
Time	**Instructor**	**Firefighter(s)**
	Explain and demonstrate the inspections and maintenance of a SCBA including the following; • Cleaning methods for the harness, face piece and cylinder. Demonstrate and explain how to inspect a harness including; • Straps: all straps fully extended, free of abrasions, excessive wear, chemical stains or damage. • Buckles: all buckles are clean, easy to operate and free of any debris or damage. • Hoses: all hoses are free of abrasions, wrinkles, excessive wear, chemical stains or damage. • Regulators: high and low pressure regulators are free of any damage or debris. • O ring: visual inspection ensuring O ring is in place and free of any damage or debris. • Bypass valve: bypass valve moves freely and properly controls flow of air into mask. Bypass valve left in closed position. Demonstrate and explain how to inspect a face piece including; • Straps: all straps fully extended, free of abrasions, excessive wear, chemical stains or damage. • Buckles: all buckles are clean, easy to operate and free of any debris or damage. • Lens: lens is not excessively scratched, no cracks in lens and lens fits properly into face piece.	Watch, listen and ask questions.

Training Topic: SCBA INSPECTION AND MAINTENANCE		
Time	**Instructor**	**Firefighter(s)**
	Demonstrate and explain how to inspect a face piece including; • Face piece: face piece is free of debris, cracks, excessive wear or abrasions. Face piece seals around lens with no breaches. Hold face piece against face with one hand and inhale for leak test. Demonstrate and explain how to inspect a cylinder including; • Any possible cylinder damage such as dents or gouges. • Hydrostatic test date, every 5 years for steel and 3 years for carbon fiber. • Cylinder pressure gauge: must read 90% of capacity and easy to read. Secure cylinder to harness and attach high pressure fitting to cylinder. Explain and demonstrate the following; • Momentarily crack cylinder to blow out any debris, then attach cylinder to high pressure fitting. • Open cylinder valve fully and listen for low air alarm to sound. • Connect face piece to low pressure regulator, crack bypass valve, check for proper breathing operations, then close bypass valve. • Check that personal gauge is within 10% of cylinder gauge. • Close cylinder valve and breathe down air supply slowly while listening for low air alarm to sound while checking for proper warning pressure on personal gauge. • Have students demonstrate a SCBA inspection.	Watch, listen and ask questions. Demonstrate a SCBA inspection.

Training Topic: SCBA INSPECTION AND MAINTENANCE		
Time	**Instructor**	**Firefighter(s)**
	Explain and demonstrate the cleaning of a SCBA and all parts; • Washes the face piece thoroughly using approved cleaner/sanitizer and rinses with water. Air dry. • Washes the harness using mild soap and water, scrub or wipe with a soft bristle brush or sponge. Air dry. • Washes cylinder using mild soap and water and a sponge. Air dry.	Watch, listen and ask questions.

SCBA INSPECTION

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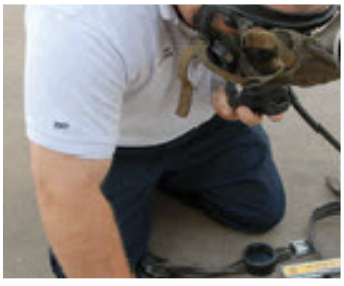

SECTION 3

Training Topic: BUILDING SEARCH TECHNIQUES

Objective(s): SKILLS DEVELOPMENT OF PRIMARY AND SECONDARY SEARCH

Details	Resources
	JIBC Basic Fire Fighter Certification Program. Essentials of Fire Fighting, 5th Edition.

Time	Instructor	Firefighter(s)
	Discuss and demonstrate the differences between a primary search and a secondary search; Primary Search; • Primary search is a rapid but thorough search that is performed either before or during fire suppression operations. It is performed as soon as possible if there is a chance that the structure is occupied. • During primary search, check known or likely locations of victims as rapidly as conditions allow. Move quickly to search all affected areas of the structure as quickly as possible. • Always work in teams of two or more. Always remain in visual, voice or physical contact with your partner. • Search the structure using an established search pattern. (Right hand search).	Listen and ask questions.

Training Topic: BUILDING SEARCH TECHNIQUES		
Time	**Instructor**	**Firefighter(s)**
	Primary search: • Identify rooms that have been searched by door marking. • Panicked victims sometimes hide. Victims could be in bathtubs or closets. Search quickly and indentify yourself as you go. Secondary Search; • Secondary search is conducted after the fire is under control. Secondary search is a slower more thorough search done to ensure that no victims were overlooked during the primary search. • Secondary search should be done by a team different from the team that conducted the primary search. • During the secondary search, speed is not as important as thoroughness. Look under beds, under stairs, and behind furniture. Explain constant contact between search team members including: voice, visual and physical; • Search is always conducted by two or more people. These team members must stay in constant contact either verbally, visually or with physical touch. Building, smoke and fire conditions dictate what kind of contact is required.	Listen and ask questions.

Training Topic: BUILDING SEARCH TECHNIQUES		
Time	**Instructor**	**Firefighter(s)**
	Explain search priorities; • Areas immediately around fire area are the first to be searched, and then rest of floor. Areas above fire floor are searched next, and then areas below fire floor. Door marking during and after search: • One slash indicates that the room is being searched. The slash may be made with tape, chalk, or any other substance that is visible in the dark. • A second slash is added to the first to make an X. This indicates that the room search has been completed. Ensure the slashes are located on the bottom third of the door so that they are visible in heavy smoke conditions.	Listen and ask questions.
	Demonstrate a two person right/left hand search utilizing a tool sweeping method including the following; • Dons PPE and conducts a check prior to entry. • Dons SCBA. • Charges and purges hose line prior to building entry. • Feels for thermal line on door surface and door handle using the back of ungloved hand. • Enters building while staying low, crawls or duck walks. • Maintains physical contact with the wall in low visibility or maintains physical contact with lead fire fighter.	Watch and ask questions.

Training Topic: BUILDING SEARCH TECHNIQUES		
Time	**Instructor**	**Firefighter(s)**
	Demonstrate a two person right/left hand search utilizing a tool sweeping method including the following; • Employs sweep action to check for mantraps, obstructions or victims. • Speaks audibly and clearly when communicating with partner. • Upon exiting a room, follows the first turn rule (continues either right hand or left hand search). • Marks the doors of rooms that have been searched according to departmental guidelines. • Demonstrate primary or secondary search procedures. • Perform a rescue of a victim using two fire fighters after contacting the Incident Commander and requesting assistance. Have students demonstrate a two person search.	Demonstrate a two person search.

TWO MAN RIGHT HAND SEARCH

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SEARCH

DOOR MARKING

ROOM IS BEING SEARCHED

SEARCH COMPLETE

SECTION 3

Training Topic: SCBA BOTTLE CHANGE, EMERGENCY PROCEDURES AND RESTRICTED PASSAGE DRILL

Objective(s): TO EXPLAIN AND DEMONSTRATE A SCBA BOTTLE CHANGE, EMERGENCY SCBA PROCEDURES AND THE RESTRICTED PASSAGE DRILL AND HAVE STUDENTS DEVELOP PRACTICAL SKILLS IN BOTTLE CHANGE, EMERGENCY PROCEDURES AND THE RESTRICTED PASSAGE DRILL.

Details	Resources
	JIBC Basic Fire Fighter Certification Program. Essentials of Fire Fighting, 5th Edition.

Time	Instructor	Firefighter(s)
	Explain and demonstrate a SCBA bottle change including; • Check to ensure the cylinder valve is closed and air in the system has been exhausted. • Disconnect high pressure hose coupling from cylinder. • Release the cylinder clamping devise and remove the spent cylinder. • Obtain full cylinder, check gauge to ensure cylinder is 90 % full or better. Check cylinder threads for damage. • Slide full cylinder into backpack, align outlet with the high pressure fitting and lock cylinder in place.	Listen and ask questions.

Training Topic: SCBA BOTTLE CHANGE, EMERGENCY PROCEDURES AND RESTRICTED PASSAGE DRILL

Time	Instructor	Firefighter(s)
	Explain and demonstrate a SCBA bottle change including; • Visually check the O ring inside the high pressure coupling to ensure it is clean, free of cuts or depressions. Momentarily crack cylinder to blow out any debris. • Connect the high pressure hose to the cylinder and tighten hand tight only. • Open cylinder valve fully. Check personal gauge is within 10% of cylinder gauge.	Listen and ask questions.
	Have students demonstrate a SCBA bottle change.	Demonstrate a SCBA bottle change.
	Explain and demonstrate how to pass through a restricted passage while wearing a SCBA including; • Kneel in front of restricted passage; loosen shoulder straps and waist strap. Unbuckle waist strap. • Remove pack from back and place on floor in front of fire fighter. Ensure the face piece is not removed from fire fighter or that air supply is compromised. • Maintain contact and control of SCBA while moving through the restricted passage while ensuring face piece is not disturbed. • Re-don the SCBA when free of obstructions and exiting of the restricted passage is complete.	Listen and ask questions.

Training Topic: SCBA BOTTLE CHANGE, EMERGENCY PROCEDURES AND RESTRICTED PASSAGE DRILL

Time	Instructor	Firefighter(s)
	Have students demonstrate how to pass through a restricted passage while maintaining a constant, uninterrupted air supply.	Demonstrate a pass through a restricted space.
	Explain and demonstrate emergency SCBA procedures including; • Manual bypass valve breathing by alternately opening and closing the bypass valve to provide sufficient air for breathing. • SCBA main cylinder valve breathing by alternately opening and closing the main cylinder valve to provide sufficient air for breathing. • If disoriented, remain calm, remain still and breath normally, make radio contact with Incident Commander then try and exit the structure. Try to retrace steps by finding a hose line, identify by feel coupling (big coupling leads to the Engine), and exit building in that direction. • If trapped, remain calm, declare a Mayday, describe location as accurately as possible, then activate PASS alarm.	Listen and ask questions.
	Have students demonstrate SCBA emergency procedures.	Demonstrate SCBA emergency procedures.

EMERGENCY BYPASS VALVE

SCBA BOTTLE CHANGE

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SECTION 4

Training Topic: ROPES AND KNOTS

Objective(s): TO DEVELOP SKILLS IN KNOT TYING AND DEVELOPING TECHNICAL KNOWLEDGE OF ROPE CONSTRUCTION USED IN THE FIRE SERVICE.

Details	Resources
	NFPA 1001 NFPA 1983 Essentials of Fire Fighting, 5th Edition Fundamentals of Fire Fighter Skills, 2004

Time	Instructor	Firefighter(s)
	Explain to students that NFPA 1001 requires that fire fighters; • Hoist tools and equipment with rope using the proper knot. • Know how to select the proper rope for the specific task. • Know how to properly maintain various types of rope used by the fire service. Explain to students that in accordance with NFPA 1983; • Rope must not be visibly damaged. • Rope must not show abrasions or have been exposed to high temperatures or direct flame contact. • Rope has not been impact loaded (a force applied to a rope when it suddenly stops a falling load). • Rope must not have been exposed to liquids, solids, gases, mists or vapors from any chemical or materials that can deteriorate rope.	Listen and ask questions.

Training Topic: ROPES AND KNOTS		
Time	**Instructor**	**Firefighter(s)**
	• Rope must pass inspection by a qualified person both before and after each use. Discuss the differences between Life Safety rope and Utility rope; • Life Safety rope is used to support rescuers and/or victims during an incident or during training. • Utility rope can be used in any other instant where rope is required, such as hoisting equipment. Discuss the uses of the following knots and demonstrate how to tie them; • Safety knot; used to secure the leftover working end of the rope. • Clove hitch; used to attach a rope firmly to a round object. • Figure 8 knot; simple to tie but seldom used alone. • Figure 8 on a bight; used to attach the end of the rope to a fixed object or a piece of equipment, or to tie a life safety rope around a person. • Figure 8 follow through; used to attach rope to a fixed ring or an eye. • Bowline; used to secure the end of a rope to an object or an anchor point.	Listen and ask questions. Listen and ask questions.

Training Topic: ROPES AND KNOTS		
Time	**Instructor**	**Firefighter(s)**
	Discuss the uses of the following knots and demonstrate how to tie them; • Becket bend (also called a sheet bend); can be used to join two ropes of unequal size or to join a rope and chain together. • Bowline on a bight; forms a loop that can be attached to a carabineer. • Figure 8 on a bight; forms a loop that can be attached to a carabineer.	Listen and ask questions.
	Have students tie the nine knots that have been demonstrated and ask about possible uses for each knot.	Tie the nine knots that have been demonstrated, and explain possible uses for each knot.

BECKET BEND

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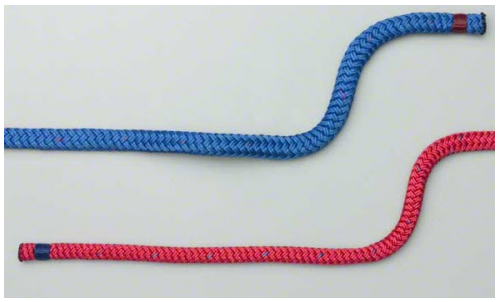

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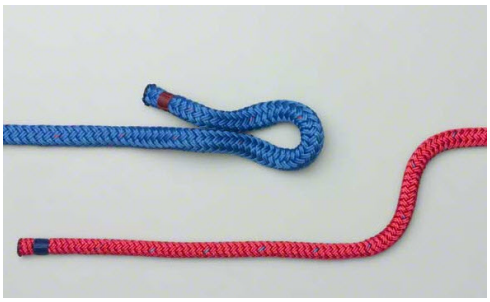

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BOWLINE

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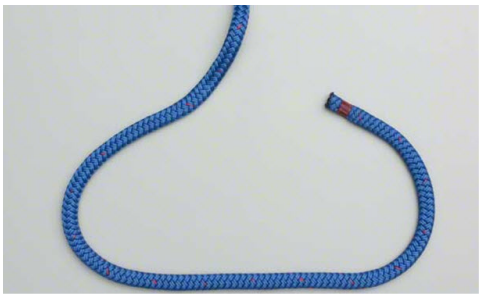

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BOWLINE ON A BIGHT

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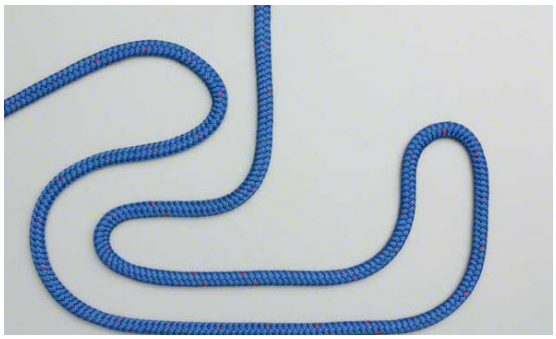

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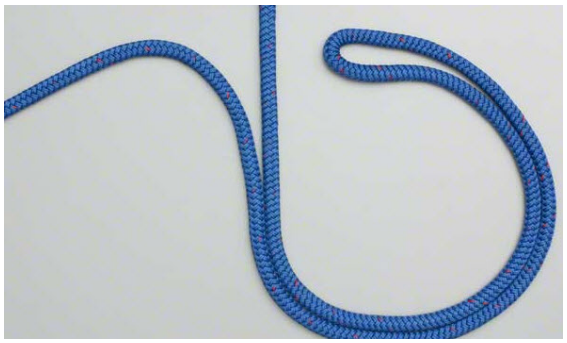

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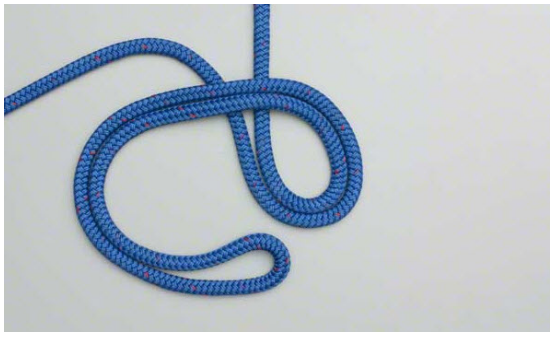

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BOWLINE ON A BIGHT

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CLOVE HITCH

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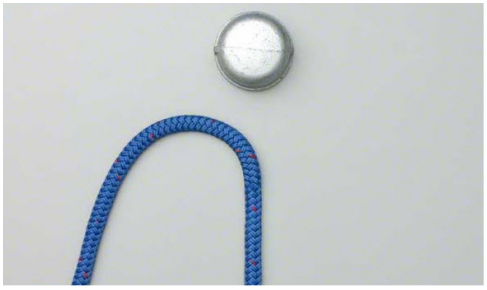

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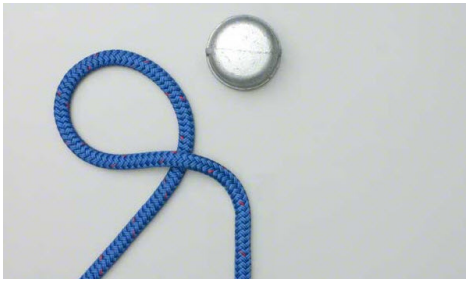

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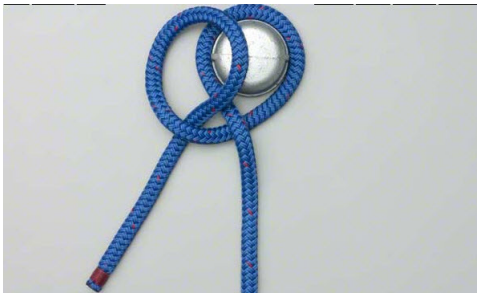

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FIGURE EIGHT

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FIGURE EIGHT ON A BIGHT

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FIGURE EIGHT FOLLOW THROUGH

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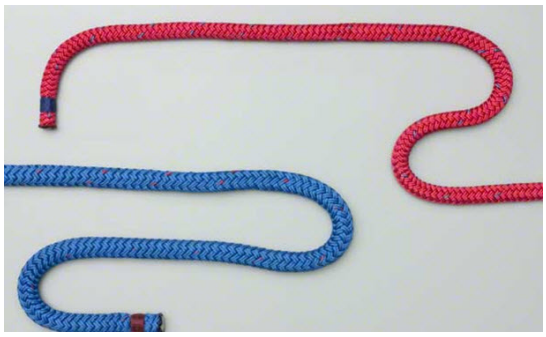

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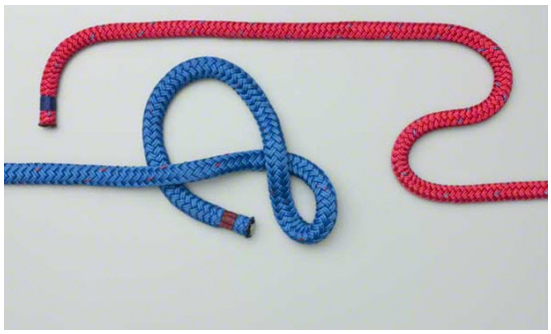

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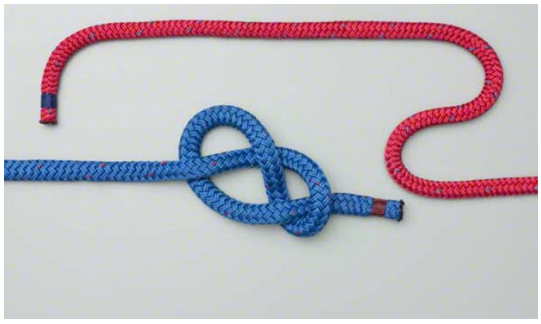

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FIGURE EIGHT FOLLOW THROUGH

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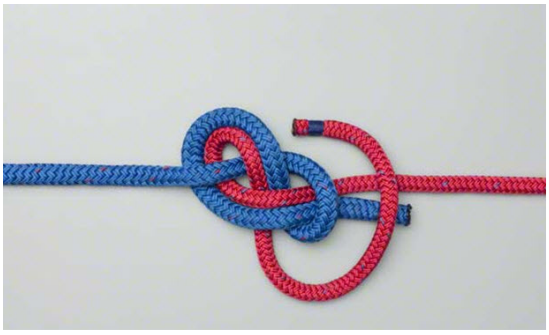

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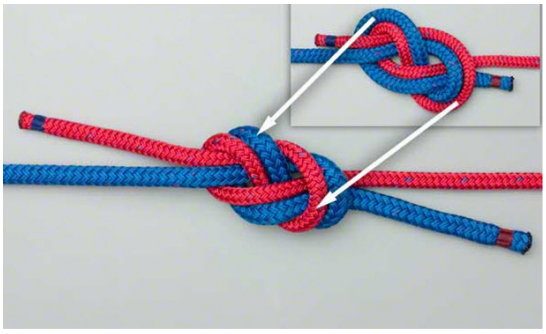

HALF HITCH

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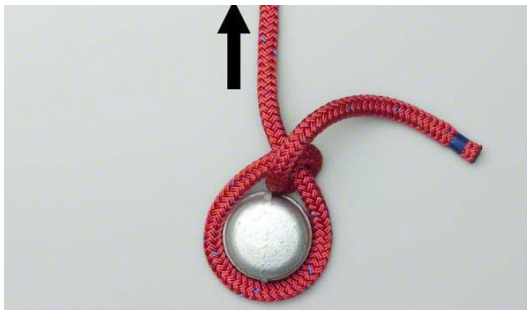

OVERHAND SAFETY

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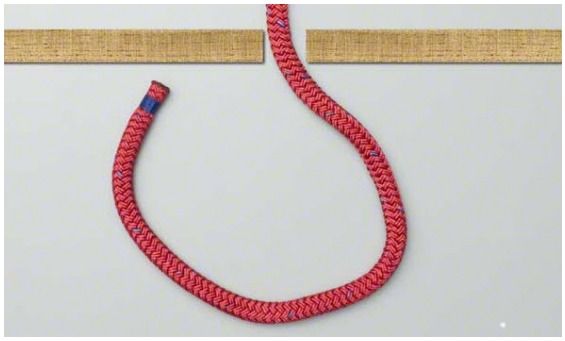

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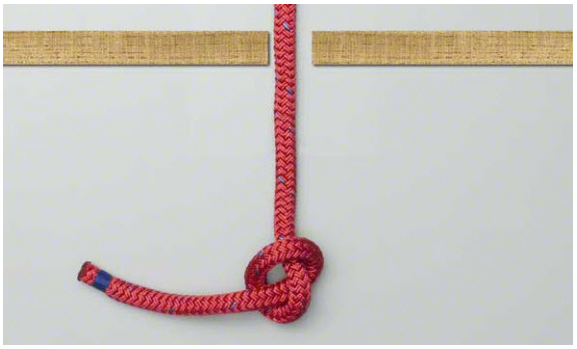

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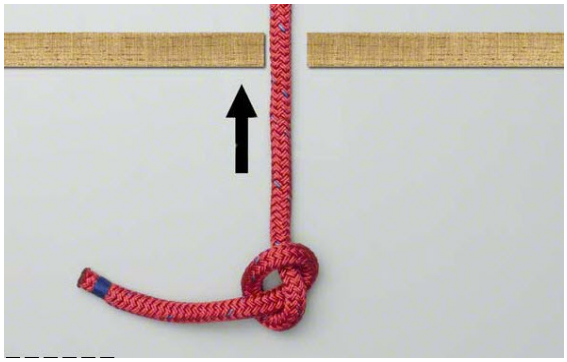

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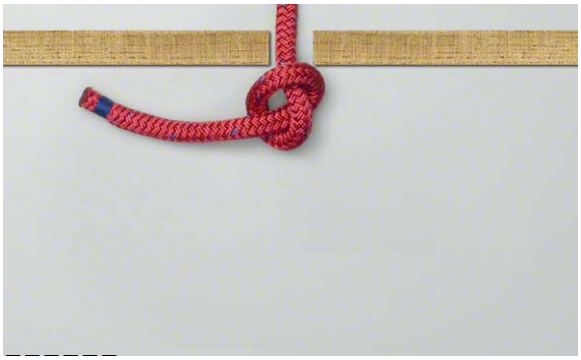

SECTION 4

Training Topic: ROPE INSPECTION AND MAINTENANCE

Objective(s): TO EXPLAIN HOW TO INSPECT AND MAINTAIN ROPE.

Details	Resources
	Fundamentals of Fire Fighting Skills, 2004 Essentials of Fire Fighting, 5th Edition

Time	Instructor	Firefighter(s)
	Explain the four parts to the rope maintenance formula; • Care • Clean • Inspect • Store Care; • Protect the rope from sharp and abrasive surfaces. Use edge protection when the rope has to pass over a sharp or unpadded surface. • Protect the rope from heat, chemicals, and flames. • Protect the rope from rubbing against another rope or webbing. Friction generates heat, which can damage rope. • Protect the rope from prolonged exposure to sunlight. Ultraviolet radiation can damage rope.	Listen and ask questions.

Training Topic: ROPE INSPECTION AND MAINTENANCE		
Time	**Instructor**	**Firefighter(s)**
	Clean; • Ropes made of synthetic fibers can be washed with a mild soap and water. • Some manufactures recommend placing the rope in a mesh bag and washing it in a front loading washing machine. • Do not use beach as it can damage the rope. • Do not pack or store wet or damp rope. Air drying is recommended. • Do not dry rope in direct sunlight. • The use of mechanical drying devices is not recommended. Inspect; • Life Safety rope must be inspected after each use. • Visual inspection includes looking for cuts, frays or abrasions. Also look for any discoloration, or flat spots. • Feel the rope for depressions (flat spots or lumps on the inside of the rope). • If there is any doubt as to whether the rope has been damaged, consult your Fire Chief. • Life safety rope can be downgraded to utility rope, but it must be clearly marked as utility rope and cannot be used for life safety again.	Listen and ask questions.

Training Topic: ROPE INSPECTION AND MAINTENANCE		
Time	**Instructor**	**Firefighter(s)**
	Store; • Store rope away from extreme temperatures and out of sunlight. • Avoid placing rope where fumes from gasoline, oils, or hydraulic fluids can damage the rope. • Do not place any heavy weight on top of the rope. • Rope bags help to protect rope. Only store one rope per bag. • Rope can be coiled for storage if no rope bag is available.	Listen and ask questions.
	Demonstrate how to inspect a rope and have students inspect a rope.	Demonstrate how to inspect a rope.
	Demonstrate how to place rope in a rope bag (if available) and then have students place rope in a rope bag.	Demonstrate how to load a rope into a rope bag.

SECTION 4

Training Topic: HOISTING

Objective(s): TO INSTRUCT STUDENTS ON HOW TO SAFELY HOIST EQUIPMENT WITH A ROPE.

Details	Resources
	Fundamentals of Fire Fighting Skills, 2004. Essentials of Fire Fighting, 5th Edition.

Time	Instructor	Firefighter(s)
	Explain and demonstrate how to hoist the following tools; • Axe • Pike pole • Hose line (uncharged) Axe; • The axe should be hoisted in the vertical position with the axe head down. • Tie the end of the hoisting rope around the handle near the head using either a figure eight on a bight or a clove hitch. • Slip the knot down the handle from the end to the head. • Loop the standing part of the rope under the axe head. • Place the standing part of the rope parallel to the axe handle. • Use one or two half hitches along the axe handle. • Raise the axe, ensuring no one is standing under the axe and the hoisting area is clear.	Watch, listen and ask questions.

Training Topic: HOISTING		
Time	**Instructor**	**Firefighter(s)**
	Pike pole; • The pike pole should be hoisted in a vertical position with the head at the top. • Place a clove hitch over the end of the handle, slip it along the handle, and secure it close to the pike. • Depending on the length of the handle, one or two half hitches can be placed on the handle below the clove hitch to keep the rope parallel to the handle. • Slip a second clove hitch over the handle and secure it near the bottom of the pike pole. • Leave an additional length of rope below the second clove hitch to be used as a tag line when hoisting the pike pole. • Raise the pike pole, ensuring no one is standing under the pike pole and the hoisting area is clear. Hose line (uncharged); • Fold about three feet of hose back on itself and place the nozzle on top of the hose. • Make a half hitch in the rope and slip it over the nozzle. Move the half hitch along the hose and secure it about six inches from the fold. • Tie a clove hitch near the end of the rope, wrapping the rope securely around both the nozzle and the hose. The clove hitch should hold both the nozzle and the hose.	Watch, listen and ask questions.

Training Topic: HOISTING		
Time	**Instructor**	**Firefighter(s)**
	Hose line (continued) • Hoist the hose with the fold at the top and the nozzle pointing down. • Before releasing the rope, the fire fighter at the top must pull enough hose so that the weight of the hanging hose does not drag down the hose. • Raise the hose line, ensuring no one is standing under the hose line and the hoisting area is clear.	Watch, listen and ask questions.
	Explain that several different tools and equipment, including an exhaust fan, chainsaw, or any other object with a closed handle can be hoisted in the same fashion as described above.	Listen and ask questions.
	Have the students demonstrate the hoisting of an axe, pike pole and an uncharged hose line.	Demonstrate the hoisting of an axe, pike pole and an uncharged hose line.

HOISTING A HOSE LINE

(UNCHARGED)

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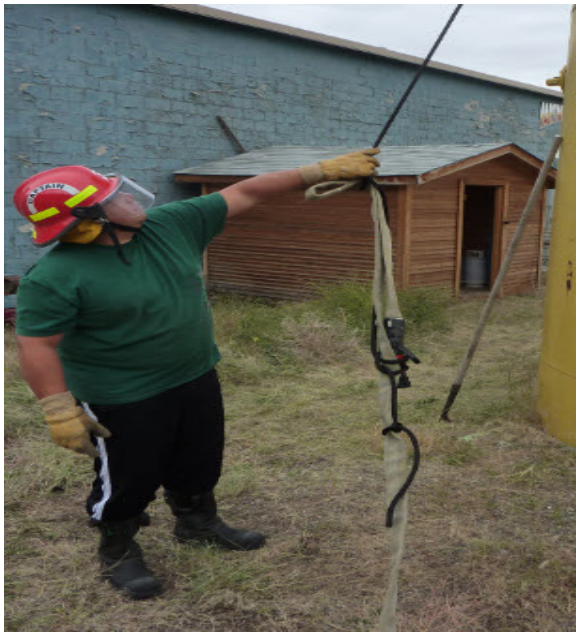

HOISTING A PIKE POLE

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HOISTING AN AXE

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SECTION 5

Training Topic: SINGLE LADDER RAISE

Objective(s): TO INSTRUCT STUDENTS ON HOW TO RAISE AND LOWER A SINGLE LADDER

Details	Resources
	Essentials of Fire Fighting, 5th Edition

Time	Instructor	Firefighter(s)
	Explain and demonstrate the carrying and raising of a single ladder using the following technique; • Using the high shoulder carry, position ladder with the butt end against the building. • Lay the ladder flat on the ground. • Check for overhead obstructions and safety hazards. • Move to the tip of the ladder, and stop 2 rungs from the end facing away from the building. • Grasping the rung, lift the ladder overhead and turn towards the building. • Raise the ladder hand over hand until the ladder is flat against the building. • Pull the base of the ladder away from the building, leaving the tip of the ladder against the building. • Check for 4 point contact and adjust ladder for proper climbing angle (75 degrees).	Listen, watch and ask questions.

Training Topic: SINGLE LADDER RAISE

Time	Instructor	Firefighter(s)
	• To lower the ladder, move the base of the ladder back to flat against the building. • Back up and hand over hand on the rungs slowly lower the ladder. • Continue lowering until 2 rungs away from the tip of the ladder. • Reach over top of the ladder and grab the second rung, pivot to the side of the ladder and lower the ladder completely to the ground. • Lift the ladder to a low shoulder carry and carry the ladder tip first away from the building. Have each student demonstrate the raising and lowering of a single ladder.	Listen, watch and ask questions. Demonstrate the raising and lowering of a single ladder.

ONE MAN SINGLE LADDER RAISE

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SECTION 5

Training Topic: EXTENSION LADDER RAISE

Objective(s): TO INSTRUCT STUDENTS ON HOW TO RAISE AND LOWER AN EXTENSION LADDER

Details	Resources
	Essentials of Fire Fighting, 5th Edition

Time	Instructor	Firefighter(s)
	Explain and demonstrate the carrying and raising of an extension ladder using a two man raise; • Using the high shoulder carry, position ladder with the butt end near the building, approximating the correct distance from the building to give the proper climbing angle (75 degrees). • The butt end man will lower his end to the ground with the fly section away from the building. • Both fire fighters check for overhead obstructions and safety hazards. • The butt end man puts one foot on the bottom rung while the tip man begins to raise the ladder to vertical rung by rung. • Foot placement outside and against the beam by both fire fighter is required to stabilize the ladder. • The outside man places both hands on the beam and then gives the order to raise.	Listen, watch and ask questions.

Training Topic: EXTENSION LADDER RAISE

Time	Instructor	Firefighter(s)
	• The inside man pulls the halyard and begins to raise the ladder, locking the dogs at the desired height. • Both fire fighters lower the ladder into the building and check for 4 point contact. • Adjust the ladder if required to attain a proper climbing angle. • Inside man ties off the halyard with a clove hitch. Explain and demonstrate the lowering of an extension ladder using two fire fighters; • Inside man unties the halyard. • Both fire fighters stabilize the ladder and move the ladder away from the building to a vertical position. • The inside man uses the halyard in a hand over hand movement to lower the ladder. • Once the ladder is lowered, the inside man ties off the halyard with a clove hitch. • Inside man give the instruction to lower and places his foot on the bottom rung of the ladder, the outside man lowers the ladder rung by rung while backing up. • When the outside man gets to the second rung from the tip, he pivots out from under the ladder and reaches over the ladder and grabs the second rung and lowers the ladder to the ground. Have each student demonstrate the raising and lowering of an extension ladder.	Listen, watch and ask questions. Demonstrate the raising and lowering of an extension ladder.

EXTENSION LADDER RAISE

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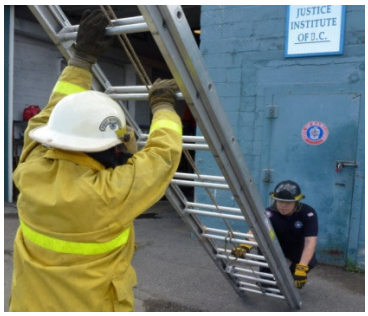

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SECTION 5

Training Topic: LADDER SAFETY

Objective(s): TO INSTRUCT STUDENTS ON HOW TO SAFELY CLIMB AND WORK OFF A LADDER

Details	Resources
	Essentials of Fire Fighting, 5th Edition

Time	Instructor	Firefighter(s)
	Explain and demonstrate how to safely climb and work off a ladder; • Always wear protective gear including gloves, helmet, safety visor or goggles. • Choose the proper ladder for the job. Using a ladder not quiet long enough can be dangerous. • Use leg muscles, not arms or back when lifting and climbing a ladder. • Use the adequate number of fire fighters for the ladder chosen. • Do not raise a ladder to within 10 feet (3m) of any electrical wires. • Always check for overhead hazards. • Check the placement of the ladder to ensure proper climbing angle (75 degrees). • Ensure 4 point contact before climbing • Do not overload the ladder. One fire fighter per ladder section.	Watch, listen and ask questions.

Training Topic: LADDER SAFETY		
TIME	**INSTRUCTOR**	**STUDENT**
	• Tie into the ladder with a leg lock. To do a leg lock, first climb to the desired height, and then advance one rung higher. Slide one leg through the ladder and behind the rung to be locked in to. Hook the foot on either the rung or the beam, and step down with the opposite leg. The fire fighter can now work off the ladder to the side away from the locked leg. • Have a fire fighter heel the ladder before another fire fighter climbs the ladder. • If possible, tie the ladder tip to something secure to prevent the ladder from tipping. • Do not relocate a positioned ladder unless instructed to do so. • Use ladders for their intended purpose only. • Inspect ladder for damage or wear after each use.	Watch, listen and ask questions.
	Have a student heel the ladder while wearing proper protective equipment, including eye protection. Have a second student climb the ladder to mid point and demonstrate a leg lock.	Demonstrate the heeling of a ladder while another fire fighter climbs the ladder and demonstrates a leg lock.

LADDER LEG LOCK

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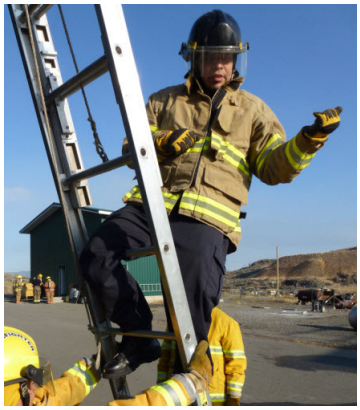

SECTION 5

Training Topic: LADDER INSPECTION AND MAINTENANCE

Objective(s): TO EXPLAIN AND DEMONSTRATE LADDER INSPECTION AND MAITENANCE. NFPA 1932 REQUIRES LADDERS TO BE INSPECTED AFTER EACH USE AND ON A MONTHLY BASIS.

Details	Resources
	Essentials of Fire Fighting, 5th Edition NFPA 1932

Time	Instructor	Firefighter(s)
	Discuss and inspect all parts of the ladder including: • Beams are the main structural member of a ladder supporting rungs. Inspect for cracks, bends or any visible damage. • Bed section is the widest section of an extension ladder. This section always stays in contact with ground or support surface during raising or lowering. Inspect for cracks, bends or any visible damage. • Butt (also called heel or base) bottom end of ladder; the end that is placed on the ground. Inspect for cracks, bends or any visible damage. • Butt spurs are metal plates, spikes or spurs attached to the butt end of the ladder to prevent slippage. Inspect for cracks, bends or any visible damage.	Listen and ask questions

SECTION 5

Training Topic: LADDER INSPECTION AND MAINTENANCE

Time	**Instructor**	**Firefighter(s)**
	• Dogs (also called pawls or locks) are devices attached to the inside of the beam on the fly sections used to hold the fly section in place after it has been extended. The hook and finger should move in and out freely. • Fly section is the upper section of the ladder; the section that moves. Inspect for cracks, bends or any visible damage • Footpads are swivel plates attached to butt of the ladder; usually have rubber or neoprene bottom surfaces. Ensure footpads are in place and in good condition. • Guides are metal strips, sometimes in the form of slots or channels, on an extension ladder that guide the fly section when being raised. Check their condition and that the fly sections move freely. • Halyard is rope or cable used for hoisting and lowering the fly section of an extension ladder. Ensure the halyard is in good condition and free of damage. • Heat-sensor labels are labels affixed to the inside of each beam of each ladder section; a color change indicates that the ladder has been exposed to a sufficient degree of heat that it should be tested before further use. Ensure sensors have not turned dark in color.	Listen and ask questions

SECTION 5

Training Topic: LADDER INSPECTION AND MAINTENANCE

Time	Instructor	Firefighter(s)
	• Hooks (on roof ladders) are curved metal devices installed near the top end of a roof ladder to secure the ladder to the highest point on a peaked roof of a building. Ensure hooks operate properly and lock in place. • Pulley is a small, grooved wheel through which the halyard is drawn on an extension ladder. Make sure the pulley moves freely. • Stops are metal pieces that prevent the fly section from being extended too far. Inspect for cracks, bends or any visible damage • Rungs are cross members that provide the foothold for climbing. Check rungs for damage, wear and tightness.	Listen and ask questions
	Have students explain the parts of a ladder and what they should be looking for when inspecting a ladder.	Explain the different parts of a ladder and what to look for when inspecting a ladder.
	Discuss cleaning of ladders including; • Ladders require cleaning after every use and at least once a month. • Accumulated dirt and debris may collect and harden to the point where the ladder sections may not function properly.	

SECTION 5

Training Topic: LADDER INSPECTION AND MAINTENANCE

	Instructor	Firefighter(s)
	Discuss cleaning of ladders including; • A soft bristle brush and running water are the most effective tools for cleaning a ladder. • Tar, oil, or greasy residues should be removed with mild soap and water. • Wipe all wet ladders dry after cleaning. • Where recommended by the manufacturer, occasional lubrication will maintain smooth operations of the ladder.	Listen and ask questions.

LADDER INSPECTION

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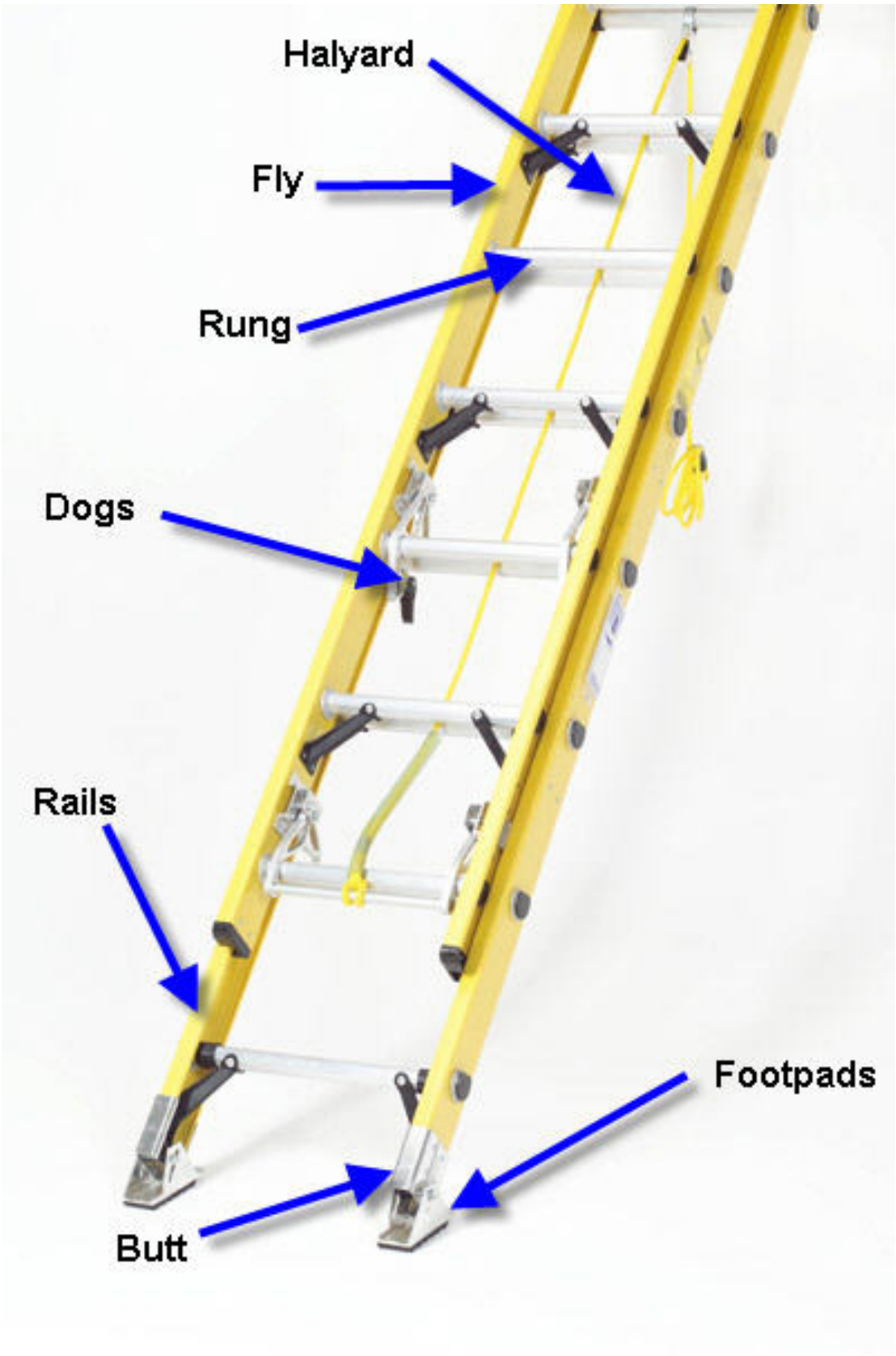
Halyard
Fly
Rung
Dogs
Rails
Footpads
Butt

SECTION 6

Training Topic: HYDRAULIC VENTILATION

Objective(s): TO EXPLAIN AND DEMONSTRATE HYDRAULIC VENTILATION AND TO HAVE STUDENTS DEVELOP PRACTICAL SKILLS USING HYDRAULIC VENTILATION.

Details	Resources
	Essentials of Fire Fighting, 5th Edition. Fundamentals of Fire Fighting Skills, 2004.

Time	Instructor	Firefighter(s)
	Explain; Hydraulic ventilation uses the water stream for the hose line to exhaust smoke and heated gases from a structure. The fire fighter working the hose line directs a narrow fog stream out of the building through a window or door. The fog pattern must cover approximately 80% of the exhaust opening. The contaminated atmosphere is drawn into a low pressure area behind the nozzle. An induced draft created by the high pressure stream of water pulls the smoke and gases out through the opening. Hydraulic ventilation advantages; • Hydraulic ventilation can move large volumes of smoke and gases. • No mechanical fans are required.	Listen and ask questions.

Training Topic: HYDRAULIC VENTILATION		
Time	**Instructor**	**Firefighter(s)**
	Hydraulic ventilation disadvantages; • There may be increased water damage inside the structure. • There will be a drain on the supply of water. • Freezing temperatures will increase the amount of ice on the ground and create a slipping hazard for fire fighters outside the structure. • Fire fighters operating the nozzle must remain inside the contaminated atmosphere while venting. • Venting operations may have to be halted while vent teams replenish their air supply.	Listen and ask questions.
	Demonstrate hydraulic ventilation to students including; • Exhaust air from the hose. • Set the fog nozzle pattern. • Enter the structure or area while wearing full PPE. • Start water flow. • Adjust the fog pattern to cover approximately 80% of the exhaust opening.	Watch and ask questions.
	Have students demonstrate hydraulic ventilation.	Demonstrate hydraulic ventilation.

HYDRAULIC VENTILATION

SECTION 6

Training Topic: NEGATIVE PRESSURE VENTILATION

Objective(s): TO EXPLAIN NEGATIVE PRESSURE VENTILATION AND TO DEVELOP THE STUDENTS PRACTICAL SKILLS IN USING NEGATIVE PRESSURE VENTILATION.

Details	Resources
	Fundamentals of Fire Fighting Skills, 2004.

Time	Instructor	Firefighter(s)
	Explain negative pressure ventilation; • The basic principles of air flow are used in negative pressure ventilation. Fire Fighters locate the seat of the fire and with a fan or blower exhaust the products of combustion out of the building through a window or door. • The fan draws the heat, smoke and fire gases out by creating a slightly negative pressure inside the building. In turn, fresh air is drawn into the structure, replacing the contaminated air. Negative pressure ventilation has several limitations including; • Positioning, power source, maintenance, and air flow control.	Listen and ask questions.

Training Topic: NEGATIVE PRESSURE VENTILATION		
Time	**Instructor**	**Firefighter(s)**
	• Often fire fighters must enter the heated and smoke filled environment to set up the ejector. Negative pressure ventilation has several limitations including; • Fire fighters may need to set up braces and hangers to set up the ejector. • Because most ejectors are electric, a power source and cord are required. • The ejector can get very dirty during use and must be taken apart and cleaned after each use. • Air flow control is difficult to manage. The fan must be completely sealed so that the exhaust air is not immediately drawn back into the building. Negative pressure ventilation has several benefits including; • Negative pressure fans can be used in smoke filled environments. Gas powered fans do not function when air is displaced by smoke. • Negative pressure fans will not feed large volumes of air to any remaining hot spots or hidden fires. • Negative pressure fans do not add carbon monoxide to the environment.	Listen and ask questions.

Training Topic: NEGATIVE PRESSURE VENTILATION		
Time	**Instructor**	**Firefighter(s)**
	Demonstrate negative pressure ventilation including; • Assess conditions and the structure to determine where to place the fan. • Hang or place fan, block off openings around exhausting fan. • Open a second door or window for air intake. • Observe safety precautions. • Connect fan to power source and then turn fan on. Have students demonstrate negative pressure ventilation.	Watch and ask questions. Demonstrate negative pressure ventilation.

NEGATIVE PRESSURE VENTILATION

SECTION 6

Training Topic: POSITIVE PRESSURE VENTILATION

Objective(s): TO EXPLAIN AND DEMONSTRATE POSITIVE PRESSURE VENTILATION AND TO ASSIST STUDENTS IN DEVELOPING PRACTICAL SKILLS USING POSITIVE PRESSURE VENTILATION.

Details	Resources
	Essentials of Fire Fighting, 5th Edition. Fundamentals of Fire Fighting Skills, 2004.

Time	Instructor	Firefighter(s)
	Explain Positive Pressure Ventilation; • PPV is a forced ventilation technique that uses a high pressure fan to create slightly higher pressure inside a building than that outside the building. • As long as the pressure is higher inside the building, the smoke and heat within the building is forced through the ventilation exit opening to the lower pressure zone outside. • There must be an opening near the seat of the fire to allow the heat and products of combustion to exhaust. • PPV requires good fire ground discipline, coordination and tactics. Explain effective PPV operations; • Take advantage of existing wind conditions whenever possible. • Keep the size of the exit opening in proportion to the entry opening.	Listen and ask questions.

Training Topic: POSITIVE PRESSURE VENTILATION		
Time	**Instructor**	**Firefighter(s)**
	Explain effective PPV operations; • Avoid creating horizontal openings by breaking glass or removing doors. • Place fan 4 to 6 feet from door and ensure fan is manned at all times. • Wait 30 to 40 seconds before team makes entry into the structure. Follow the fresh air in. Explain the advantages of PPV including; • A single fire fighter can set up the fan. • The fan does not interfere with interior operations. • Increased visibility for fire fighter which aids in finding victims, the seat of the fire, and makes hazards inside the structure more visible. • Reduces temperature inside the structure by removing super heated smoke and fire gases. • Reduces back draft and flashover potential. • Positive pressure fans do not require the cleaning or maintenance as negative pressure fans because the products of combustion do not go through the fan. • The fire fighter does not have to enter the hazardous atmosphere to start PPV operations.	Listen and ask questions.

Training Topic: POSITIVE PRESSURE VENTILATION		
Time	**Instructor**	**Firefighter(s)**
	Explain the disadvantages of PPV including; • PPV operations can increase fire growth and spread. • PPV can push the fire into unaffected areas of the structure. • Existing wind conditions can prevent effective PPV operations. • PPV fans are very noisy and can hamper fire ground communications. • PPV fan motors get hot and are unsafe to use if combustible vapors are present. • PPV fans can increase carbon monoxide levels inside a structure.	Listen and ask questions.
	Demonstrate PPV operations including; • Accessing conditions and the structure to determine where to place the fan. • Regulate the exhaust opening. • Place the fan. • Observe all safety precautions. • Establish the desired draft path between the entry and exit point.	Watch demonstration and ask questions.
	Have students demonstrate PPV operations.	Demonstrate PPV operations.

POSITIVE PRESSURE VENTILATION

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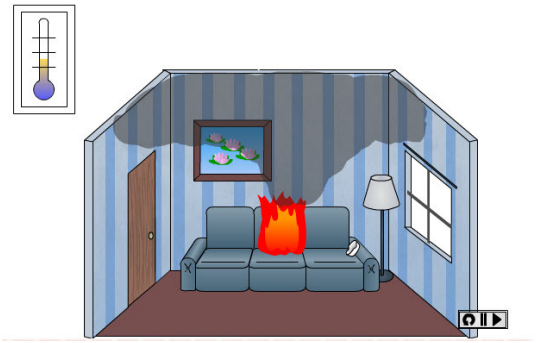

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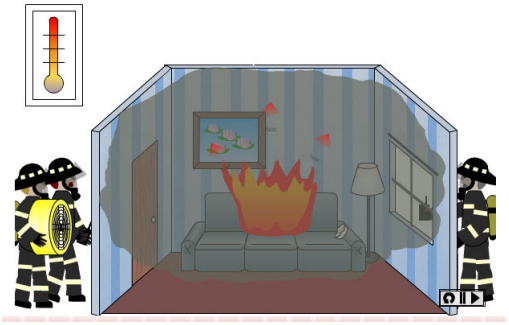

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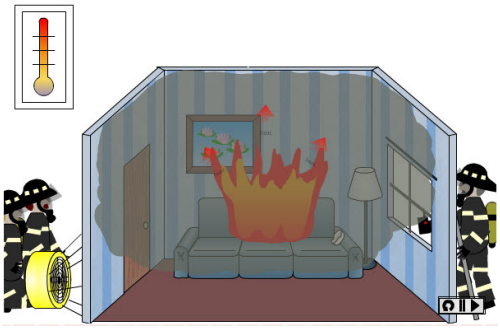

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POSITIVE PRESSURE VENTILATION

PAGE 2

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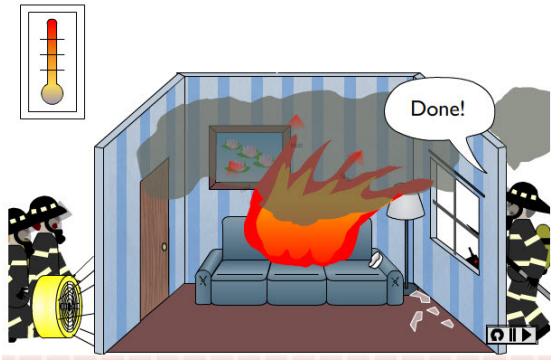

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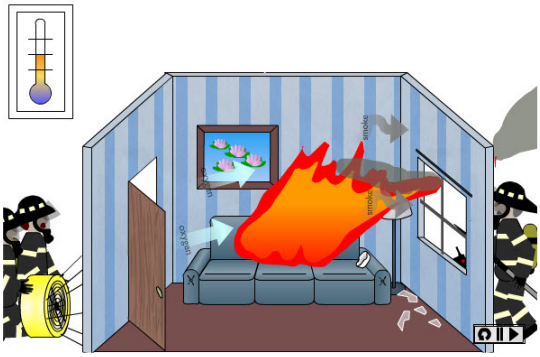
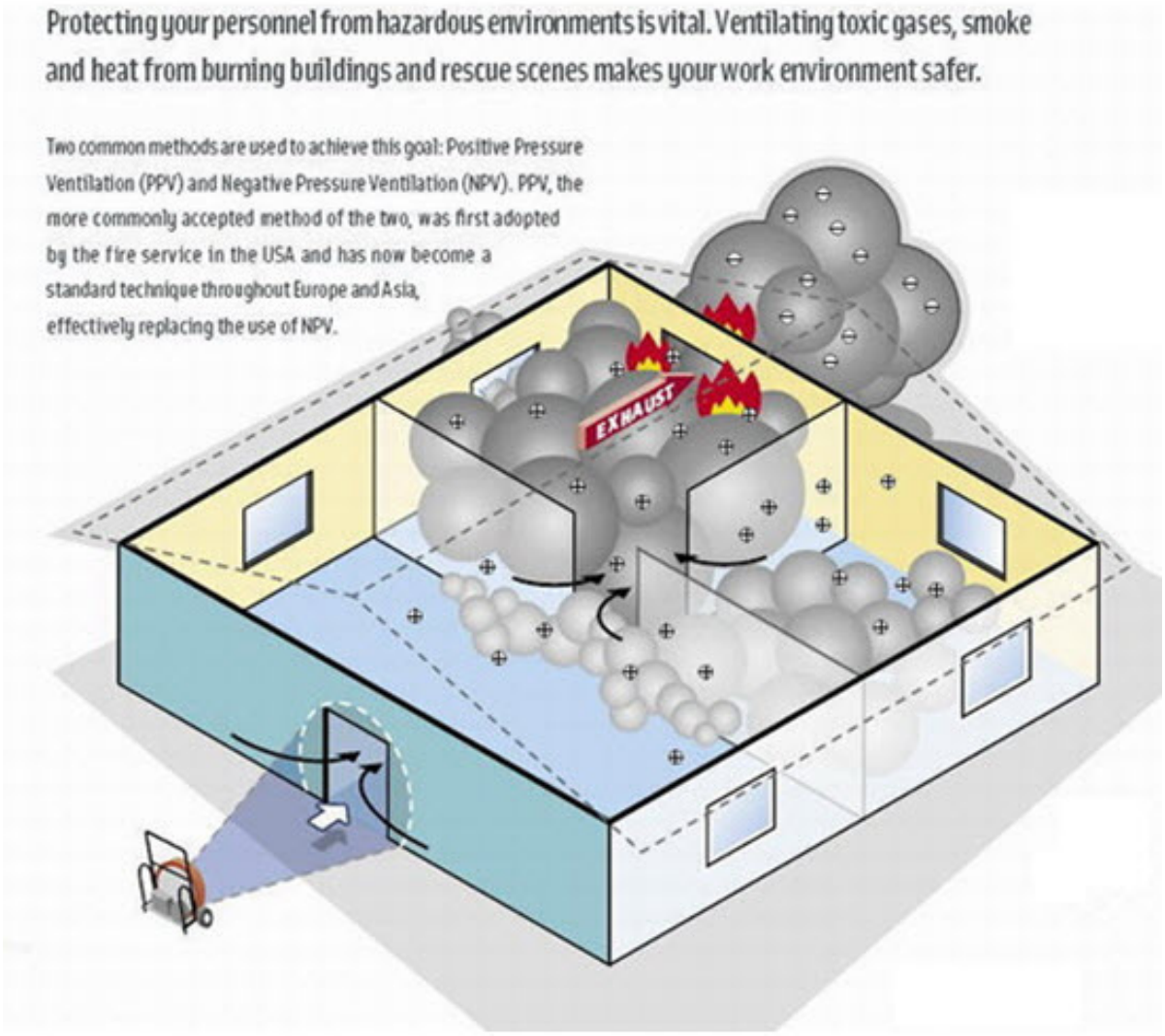


POSITIVE PRESSURE VENTILATION



SECTION 7

Training Topic: FIRE HOSE ROLLS

Objective(s): TO INSTRUCT STUDENTS ON DEVELOPING PRACTICAL SKILLS WITH HOSE ROLLS.

Details	Resources
	JIBC Basic Fire Fighter Certification Program. Essentials of Fire Fighting, 5th Edition. Fundamentals of Fire Fighting Skills, 2004.

Time	Instructor	Firefighter(s)
	Explain to the students that rolling hose is an efficient way to transport a single section of hose. Rolled hose is compact, easy to manage and easy to deploy.	Listen and ask questions.
	Explain and demonstrate a straight roll, donut roll and a twin donut roll. Straight roll; • Lay the length of hose to be rolled flat and straight. • Begin by rolling the male coupling over on top of the hose. • Roll the hose to the female coupling. • Set the hose on its side and tap any protruding hose flat with your foot.	Watch demonstration, ask questions.
	Have student demonstrate a straight roll.	Demonstrate a straight roll.

Training Topic: FIRE HOSE ROLLS		
Time	**Instructor**	**Firefighter(s)**
	Donut roll; • Place the hose flat and in a straight line. • Locate the mid-point of the hose. • From the mid-point, move 5 feet towards the male coupling end. Start rolling the hose towards the female coupling. • At the end of the roll, wrap the excess hose of the female end over the male coupling to protect the threads. Have students demonstrate a donut roll. Twin donut roll; • Lay the hose flat and in a straight line. • Bring the male coupling alongside the female coupling. • Fold the far end over and roll towards the couplings, creating a double roll. • The roll can be carried by hand, rope or strap. Have students demonstrate a twin donut roll.	Watch and ask questions. Demonstrate a donut roll. Watch and ask questions. Demonstrate a twin donut roll.

DONUT ROLL

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STRAIGHT ROLL

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TWIN DONUT ROLL

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SECTION 7

Training Topic: FIRE HOSE LOADS

Objective(s): TO EXPLAIN AND DEMONSTRATE FIRE SERVICE HOSE LOADS AND TO HAVE STUDENTS DEVELOP PRACTICAL SKILLS IN HOSE LOADS.

Details	Resources
	JIBC Basic Fire Fighter Certification Program. The Essentials of Fire Fighting, 5th Edition. Fundamentals of Fire Fighting Skills, 2004.

Time	Instructor	Firefighter(s)
	Explain and demonstrate the following hose loads; • Accordion load • Horseshoe load • Flat load • Minute man load • Straight finish load • Triple layer load The accordion load; Derives its name from the manner in which the hose appears after loading. The hose is laid on edge in folds that lie adjacent to each other. The advantage of this load is the easy of loading. Demonstrate the accordion load; • Lay the first length of hose in the hose bed on its edge against the side of the hose bed. • Double the hose back on itself at the rear of the hose bed.	Listen and ask questions. Watch and ask questions.

Training Topic: FIRE HOSE LOADS		
Time	**Instructor**	**Firefighter(s)**
	The accordion load; • Lay the hose next to the first length and bring it to the front of the hose bed. Fold the hose at the front of the hose bed so the bend is even to the edge of the hose bed. Continue to lay folds of hose across the hose bed. • Alternate the length of hose folds at each end to allow more room for the folded ends. When the bottom layer is complete, angle the hose upwards to begin the second tier. Continue the second layer by repeating the steps of the previous layer.	Watch and ask questions.
	Have students demonstrate the accordion hose load.	Demonstrate the accordion hose load.
	The horse shoe load: Named for the way it appears after loading. Like the accordion load, it is loaded on edge, and is placed in a U-shaped configuration around the perimeter of the bed, working towards the middle. Each length is progressively laid from the outside of the bed towards the inside so that the last length is at the center of the horse shoe. The primary advantage of the horse shoe load is that it has fewer sharp bends in the hose than that of the accordion or flat load. Some disadvantages are that a wide bed is required and on deployment, the hose sometimes comes out wavy or snake-like, resulting in an inefficient hose lay.	Listen and ask questions.

Training Topic: FIRE HOSE LOADS		
Time	**Instructor**	**Firefighter(s)**
	Demonstrate the horse shoe load; • Start with the male coupling in the rear corner of the hose bed. • Lay the first length of hose on its edge against the right or left wall of the hose bed. • At the front of the hose bed, lay the hose across the width of the bed and continue down the opposite side towards the rear. • When the hose reaches the rear of the hose bed, fold the hose back on itself and continue laying it back toward the front of the hose bed. Keep the tight to the previous rows of hose around the bed. • Continue to pack the hose on the first layer until the center of the horseshoe is full, and then begin a second layer by bringing the hose from the rear of the bed and laying it around the perimeter of the hose bed.	Watch and listen.
	Have the students demonstrate a horseshoe load.	Demonstrate a horseshoe load.
	The flat load; Of the 3 supply hose loads, the flat load is the easiest to load. It is suitable for any size of hose and is the best way to load large diameter hose. As the name implies, the hose is loaded flat instead of on edge.	

Training Topic: FIRE HOSE LOADS		
Time	**Instructor**	**Firefighter(s)**
	Demonstrate a flat load; • To set up for a forward lay, place the male hose coupling in the hose bed first. • Place the hose down the bed towards the rear, then fold the hose back on itself and run the hose back to the front of the bed. • While laying the hose back and forth, angle the hose to the side of the previous fold. • Continue to lay the hose in neat folds until the whole hose bed is covered with a layer of hose.	Watch and ask questions.
	Have students demonstrate a flat load.	Demonstrate a flat load.
	The minute man hose load; Designed to be pulled and advanced by one person. The primary advantage of this load is that it is carried on the shoulder, completely clear of the ground, so it is less likely to snag on obstacles. The load pays off the shoulder as the fire fighter advances towards the fire. This load is well suited for a narrow hose bed. The minute man load can be difficult to carry if the fire fighter is wearing an SCBA.	
	Demonstrate the minute man hose load. • Connect the first section of hose to the discharge outlet. Do not connect it to the other lengths of hose. • Lay the hose flat in the bed to the front. Lay the remaining hose out the front of the bed to be used later.	Watch and ask questions.

Training Topic: FIRE HOSE LOADS		
Time	**Instructor**	**Firefighter(s)**
	Demonstrate the minute man hose load; • Couple the remaining hose sections together and attach the nozzle to the male end. • Place the nozzle to top of the first length at the rear of the bed. • Lay the hose to the front of the bed, then fold and lay back to the rear until all the hose being loaded is in the bed. • Connect the male coupling of the first section to the female of the last section. • Continue to load the hose in the bed in the same manner until the length is completely loaded. Have students demonstrate a minute man hose load. Triple layer hose load; The triple layer hose load gets its name because the load begins with the hose folded in three layers. The three folds are then laid into the bed in an S shape fashion. The load is designed to be deployed by one person. One disadvantage to the load is that it must be completely removed from the hose bed before the line can be charged. Demonstrate the triple layer hose load; • Start the load with the sections of hose connected and the nozzle attached. Connect the female coupling to the discharge and extend the hose in a straight line to the rear.	Watch and ask questions. Demonstrate a minute man hose load. Watch and ask questions.

Training Topic: FIRE HOSE LOADS		
Time	**Instructor**	**Firefighter(s)**
	Demonstrate the triple layer hose load; • Pick up the hose at a point two thirds the distance from the tailboard to the nozzle and carry this hose to the tailboard. • Using several fire fighters, pickup the entire length of the three layers. • Begin laying the hose into the bed by folding over the three layers into the hose bed. • Fold the layers over at the front of the bed and lay them back to the rear of the bed until the load is complete. Have students demonstrate a triple lay hose load.	Watch and ask questions. Demonstrate a triple lay hose load.

ACCORDION HOSE LOAD

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FLAT HOSE LOAD

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HORSESHOE HOSE LOAD

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MINUTE MAN LOAD

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TRIPLE LAYER LOAD

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SECTION 7

Training Topic: FIRE HOSE COUPLING AND UNCOUPLING

Objective(s): TO DEMONSTRATE TO STUDENTS COUPLING AND UNCOUPLING METHODS AND TO HAVE THE STUDENT DEVELOP PRACTICAL SKILLS IN COUPLING AND UNCOUPLING HOSE LINES.

Details	Resources
	JIBC Basic Fire Fighter Certification Program. Essentials of Fire Fighting, 5th Edition.

Time	Instructor	Firefighter(s)
	Explain and demonstrate the following coupling and uncoupling methods; • Foot tilt method. • Knee press method. • Demonstrate gasket inspection.	Listen and ask questions.
	Foot tilt method; • Stand facing two couplings so that one foot is near the male end. Place a foot on the hose directly behind the male coupling and apply pressure to tilt it up. • Grasp the female end by placing one hand behind the coupling and the other on the swivel. • Bring the two couplings together and turn the swivel clockwise to make the connection.	Watch and ask questions.
	Have students demonstrate the foot tilt method.	Demonstrate the foot tilt method.

Training Topic: FIRE HOSE COUPLING AND UNCOUPLING		
Time	**Instructor**	**Firefighter(s)**
	Explain and demonstrate the knee press method of coupling and uncoupling a hose; • Grasp the hose behind the female coupling and stand the male coupling on end. Set feet wide apart for balance. • Place one knee upon the hose and the shank of the female coupling. • Snap the swivel quickly in a counterclockwise direction as body weight is applied to loosen the connection.	Watch and ask questions.
	Have students demonstrate the knee press uncoupling method.	Demonstrate the knee press method.
	Explain and demonstrate how to inspect a hose gasket.	Listen and ask questions.

FOOT TILT COUPLING

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TWO FIRE FIGHTER COUPLING

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SECTION 7

Training Topic: FIRE HOSE ADVANCEMENT

Objective(s): TO EXPLAIN AND DEMONSTRATE TO STUDENTS HOSE ADVANCEMENT TECHNIQUES AND DEVELOP THE STUDENTS PRACTICAL SKILLS IN ADVANCING HOSE LINE.

Details	Resources
	JIBC Basic Fire Fighter Certification Program. Essentials of Fire Fighting, 5th Edition.

Time	Instructor	Firefighter(s)
	Explain and demonstrate fire hose advancement techniques including; • Correct shoulder carry for a minute man hose load. • Correct shoulder carry for a triple layer hose load. • Demonstrate the correct shoulder loading and advancement up a set of stairs. • Demonstrate the correct shoulder loading and advancement up a ladder. Minute man shoulder carry; • Grasp the nozzle and bottom loop. • Pull the load one third to one half of the way out of the hose bed. Face away from the apparatus.	Listen and ask questions. Watch and ask questions.

Training Topic: FIRE HOSE ADVANCEMENT		
Time	**Instructor**	**Firefighter(s)**
	Minute man shoulder carry (con't); • Place the hose load on the shoulder with the nozzle against the stomach. • Walk away from the apparatus, pulling the hose out of the bed by the bottom loop. • Advance towards the fire, allowing the load to pay off from the top of the pile. Have the students demonstrate the minute man shoulder carry. Triple layer shoulder carry; • Place the nozzle and fold of the first tier of hose over the shoulder and face the direction of travel. • Walk away from the apparatus until the hose is completely out of the hose bed. Drop the folded end from the shoulder when the triple lay is fully extended. • Take the single length of hose, with nozzle attached, and advance. Have the students demonstrate the triple layer shoulder carry. Advancement up a set of stairs; • Position for shouldering the hose line by facing the nozzle end of the hose with about 15 feet of hose between fire fighters. • Place hose bundles on same shoulder of all fire fighters.	Demonstrate the minute man shoulder carry. Demonstrate the triple layer shoulder carry.

Training Topic: FIRE HOSE ADVANCEMENT		
Time	**Instructor**	**Firefighter(s)**
	Advancement up a set of stairs; • Position stationary fire fighters along the route and on the stairs at critical points (obstructions and corners) to help feed the hose line and to keep the hose on the outside of the staircase. • Advance the hose line up a flight of stairs against the outside wall to avoid sharp bends and kinks. • Flake any excess hose up the stairway leading to the floor above the fire to make fire floor advancement easier and quicker. Have the students demonstrate hose advancement up a set of stairs. Advancement up a ladder; • Advance the hose to the ladder. Pick up the nozzle and place the hose across your chest, with the nozzle draped over your shoulder and laying on your back. • Climb up the ladder with the uncharged line. Once the fire fighter reaches the first fly section, a second fire fighter assists advancing the hose line up the ladder. Be careful not to overload the ladder, only one fire fighter per section. • The nozzle is placed over the top rung of the ladder and advanced to the fire area. Have the students demonstrate advancing a hose line up a ladder.	Demonstrate hose advancement up a set of stairs. Demonstrate hose advancement up a ladder.

Training Topic: FIRE HOSE ADVANCEMENT		
Time	**Instructor**	**Firefighter(s)**
	Replacing a defective section of hose; • Shut down burst line as soon as possible. If the line cannot be shut down at the pump or control valve, a hose clamp can be used to stop the flow of water by clamping on the first undamaged section approximately 10 feet before the coupling of the burst section. • Remove the damaged section and replace with two new sections of hose. This ensures adequate length for replacement. Take the burst section and remove it from service. Using the hose to tie a knot in it at one end of the hose will indicate that the hose has been damaged. Have students replace a section of hose and knot the damaged section.	Watch and ask questions. Demonstrate replacement of a section of hose and knot the damaged section.

SHOULDER LOAD ADVANCEMENT

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ADVANCEMENT UP STAIRS

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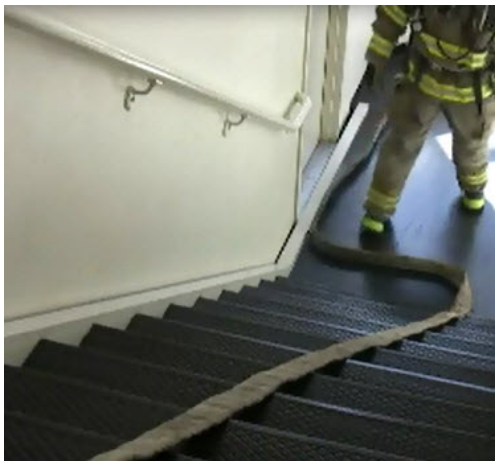

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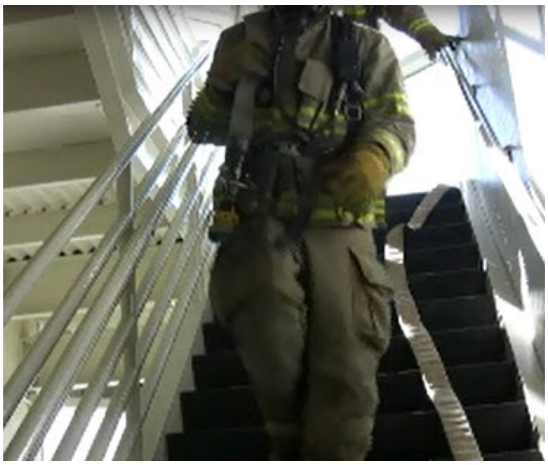

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LADDER ADVANCEMENT

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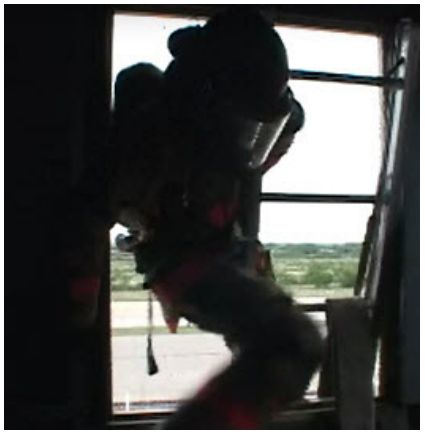

REPLACING A BURST LINE

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SECTION 7

Training Topic: APPLIANCES AND HOSE MAINTENANCE

Objective(s): TO DEMONSTRATE TO STUDENTS THE USE OF FIRE APPLIANCES AND HOW TO CONDUCT HOSE MAINTENANCE.

Details	Resources
	JIBC Basic Fire Fighter Certification Program. Essentials of Fire Fighting, 5th Edition.

Time	Instructor	Firefighter(s)
	Explain and demonstrate the use of the following appliances; • Double male adapter. • Double female adapter. • Gated Wye. • Hose clamps. • Hose spanners and hydrant wrench. Hose maintenance; • Check nozzle gaskets for damage. • Inspect nozzle for cleanliness, internal debris and visible damage. • Clean nozzle using mild soap, water and a soft brush. Check for ease of operation and inspect coupling. • Cleans hose, inspecting couplings for damage, including gaskets. Clean couplings. • Inspect hose for damage.	Watch, listen and ask questions. Watch, listen and ask questions.

SECTION 8

Training Topic: WATER SUPPLY

Objective(s): TO EXPLAIN AND DEMONSTRATE TO STUDENTS HOW TO SAFELY AND EFFECTIVELY SECURE A WATER SUPPLY AND TO HAVE STUDENTS DEMONSTRATE PRACTICAL SKILL IN SECURING A WATER SUPPLY.

Details	Resources
	JIBC Basic Fire Fighter Certification Program. Essentials of Fire Fighting, 5th Edition. Fundamentals of Fire Fighting Skills, 2004.

Time	Instructor	Firefighter(s)
	A sustainable water supply is essential to all fire ground operations. Fire fighters must be able to quickly establish a water supply that is dependable and will meet fire suppression requirements. Failure to establish such a water supply limits operational capability and places fire fighters at risk.	Listen and ask questions.
	Explain and demonstrate how to secure a water supply to a hydrant; • Dismount the apparatus, take applicable tools including a supply line, and secure the hydrant line with fold and foot pin and signal the driver to proceed. • Remove the required caps from the hydrant while standing in the safe zone. • Connect the appropriate appliances, and then connect the supply line.	Watch and ask questions.

Training Topic: WATER SUPPLY		
Time	**Instructor**	**Firefighter(s)**
	Explain and demonstrate how to secure a supply line to a hydrant; • Wait for the appropriate signal before opening the hydrant or gate appliance. • Fully open the hydrant. • Follow the supply line to the apparatus, tighten any leaking couplings. Have students demonstrate how to secure a supply line to a hydrant. Explain and demonstrate how to draft from a static water supply; • Inspect hard suction hose couplings and gaskets. • Connect hard suction to pump. • Connect strainer to hard suction and place in water supply. • Connect discharge line. • Prime pump, then charge and purge hose line. • Establish and maintain a water flow. Have students demonstrate how to draft from a static water supply.	Watch and ask questions. Demonstrate how to secure a supply line to a hydrant. Watch and ask questions. Demonstrate how to draft from a static water supply.

SECURING A HYDRANT WATER SUPPLY

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HYDRANT SAFE ZONE

DRAFTING FROM A STATIC SUPPLY

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